

THE POLITICAL ECONOMY OF BELIEFS:
WHY FISCAL AND SOCIAL CONSERVATIVES/LIBERALS COME HAND-IN-HAND

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Abstract Religious intensity as social insurance may explain why fiscal and social conservatives and fiscal and social liberals tend to come hand-in-hand. We find evidence that religious groups with greater within-group charitable giving are more against the welfare state and more socially conservative. The alliance reverses for members of a state church and increases in church-state separation precede increases in the alliance between fiscal and social conservatism. The theory provides a novel explanation for religious history: as elites gain access to alternative social insurance, they increase church-state separation to create a constituency for lower taxes. This holds if religious voters exceed non-religious voters, otherwise, elites prefer less church-state separation in order to curb the secular left, generating multiple steady states where some countries sustain high church-state separation, high religiosity, and low welfare state, and vice versa. We use this framework to explain the changing nature of religious movements, from Social Gospel to the religious right, and why church-state separation arose in the U.S. but not in many European countries.

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From abolition [of slavery] to woman suffrage to civil rights, the leaders of America's most successful liberal crusades have turned to the Bible to justify their causes. But the history of the religious left seems to stop in 1968, the starting point of a decades-long trend by which Democrats have become the secular party and the Republicans the religious party (Lizza 2005).

1. INTRODUCTION

Why do fiscal and social conservatives and fiscal and social liberals come hand-in-hand in the times and places that they do? The alignment is puzzling since the fiscal libertarianism espoused by the Republican party could be a good fit with an equally libertarian position on issues of personal choice such as abortion. Some go so far as to argue that depending on the welfare state is the same as worshipping the government as if it were God:

“Americans of today view their government in the same way as Christians view their God: they worship and adore the state” (Hornberger 1993).

“The Bible opposes big human government. ... Human government tries to replace God when it attempts to solve every human problem. It is idolatry (worship of a false god) to look to government to solve all our problems (i.e., poverty, health care, education, etc.)” (Fernandez et al. 2003).¹

Social surveys like the General Social Survey indicate that individuals who attend religious services more frequently are less supportive of the welfare state and more fundamentalist.² To put this in perspective, religious attendance is substantially more effective than gender in predicting welfare support (and one-third as effective as income).³ No obvious theory explains political alignment along one diagonal versus another in a matrix of fiscal and social attitudes, and why religious groups often emphasize individual responsibility at the expense of the welfare state. Furthermore,

¹These beliefs are not completely atypical in a country where 42% believe in creationism (2014 Gallup poll) and where 31% are fundamentalist (General Social Survey).

²Welfare support is measured from the question: "We are faced with many problems in this country, none of which can be solved easily or inexpensively. Are we spending too much money, too little money, or about the right amount on welfare?" Table I shows the correlation. Appendix Figure 1 shows the raw data and Appendix Figure 2 shows the pattern for other fiscal attitudes.

³Comparing the roughly one-quarter of the U.S. population who attend once a week or more, only a small fraction (about 14%) believe that welfare spending is too low, but this increases by half for the one-fifth of the U.S. population who never attend religious services. Luttmer (2001) reports that among households in the top quintile, 12% believe welfare spending is too low. Among households in the bottom quintile, 36% believe welfare spending is too low. Notably, gender differences in welfare support have been the subject of much theoretical and empirical study (Edlund and Pande 2002).

this alignment is not static. Fogel (2000) documented how religious movements shifted redistributive preferences. The Social Gospel movement of the early 1900s and Christian democracy (a political ideology that emerged in nineteenth-century Europe under the influence of Catholic social teaching) are clear examples of an alternative alignment of fiscal and social attitudes. We build a model to explain: 1) why fiscal and social conservatism align together in most countries, 2) why fiscal and social conservatism did not align together in the past or in some countries today, and 3) why some countries sustain high religiosity, low welfare state, and high church-state separation, while others sustain low religiosity, high welfare state, and low church-state separation. We present empirical tests of the causal effects of church-state separation.

Our explanation begins with the observation that religion offers social insurance (Iannaccone 1998; Berman 2000; Dehejia et al. 2005; Chen 2010⁴)—in the U.S., religious participation smooths 35% of income shocks⁵—and thus the religious right may be against welfare when it competes with them to provide services to the same constituency. Several studies find that government welfare crowds out church participation and charitable provision (Gill and Lundsgaarde 2004; Hungerman 2005; Gruber and Hungerman 2007). Moreover, it is well-documented that countries with high religiosity have low levels of welfare state spending and vice versa (Gill and Lundsgaarde 2004; Scheve and Stasavage 2006; Cavanaugh 2005). But church-state separation mediates the relationship between religiosity and welfare support across countries (Huber and Stanig 2011). Welfare is not competitive against religious groups when government funding can be distributed to religious groups.

To explain multiple steady states, we build a model where elites desiring low taxes prefer to separate church and state when the relative weight of religious constituencies is large. In brief, this causes religious constituencies to shift to fiscal conservatism, which then reduces the size of welfare state, but this generates a positive feedback, increasing religious constituencies. At the other extreme, elites prefer a state church when the relative weight of non-religious constituencies is large. This causes non-religious constituencies to align with fiscal conservatism, which then creates pressure for a smaller welfare state, but this generates a negative feedback as a smaller welfare

⁴In a financial crisis, tuition fees for parochial schools were waived and individuals seeking employment were matched to employers seeking workers through public announcements at religious meetings; 70% of income shocks during the crisis were smoothed by religious institutions, even providing support ex-post (Chen 2010).

⁵In 2003, American giving to religious organizations amounted to \$84 billion (Cadge and Wuthnow 2006 citing U.S. Statistical Abstract 2004) and half of all philanthropic donations by individuals go to religious organizations. Up to 20–25 percent of church expenditures are for charitable purposes, amounting to \$24 billion in philanthropic services (Biddle 1992).

state increases religious constituencies. These multiple steady states are consistent with the fact that countries with high levels of religiosity tend not to have a state religion (and vice versa) (Finke and Stark 1992; Iannaccone 1998; Barro and McCleary 2005). The degree to which religiosity differs is reflected in the fact that 96% of Americans believe in God (Marshall 2002), while 51% of EU citizens believe in God, ranging from 79% in Poland to 18% in Sweden in Eurobarometer polls.

Our empirical analysis focuses on establishing the causal linkages for multiple steady states of the impact of church-state separation. Before doing so, we refresh the evidence on fiscal and social conservatism and liberalism coming hand-in-hand at the individual level within countries. Converse (1964) and Poole and Rosenthal (1991), (1997) show that fiscal and social conservatism align in U.S. congressional voting. Gill and Lundsgaarde (2004), Scheve and Stasavage (2006), and Cavanaugh (2005) present cross-country evidence. We show individual-level evidence. Second, we bring empirical support for the well-established theoretical link between social conservatism and insurance—risk-sharing mechanisms are self-sustaining if agents are punished with permanent autarky if they choose to defect (Coate and Ravallion 1993; Kocherlakota 1996; Alvarez and Jermann 2000; Krueger and Perri 2002; Genicot and Ray 2003), and risk-sharing is more necessary without alternative forms of social insurance⁶ (see also Ager and Ciccone (2014) and Bentzen (2015) for the historical relationship between volatility and religiosity). Social conservatism being necessary to sustain ex-post insurance is consistent with conservative groups having stronger social sanctions to make mutual insurance more self-sustaining relative to social groups without strong social sanctions amid volatility. Individual guilt (norms), nurtured through religious and family education, can work as self-enforcement mechanisms for social insurance (Fafchamps 2004; Ellsworth 1989). More socially conservative religious groups—often referred to as fundamentalist—levy more sanctions against out-groups. Indeed, the provision of within-group social insurance varies substantially across religious groups and is positively correlated with conservatism: for example, church involvement among evangelical Protestants is associated mainly with volunteering within the congregation, while mainline Protestants are more likely to volunteer outside their group (Wuthnow 2004). We present quantitative evidence that religious groups with greater within-group charitable giving and within-group insurance are more against the welfare state and more socially conservative.

⁶An increase in income volatility from 1972 to 1998 (Krueger and Perri (2002) model the implications of the increase in volatility of the transitory component of income.) is consistent with the contemporaneous rise in religious intensity in U.S. popular and public discourse.

The main stylized fact we unveil is the fact that the political alignment reverses (social conservatives become fiscal liberals) for members of a state church at the individual level and this reversal is unlikely to be driven by omitted environmental variables: increases in church-state separation precede increases in the alliance between fiscal and social conservatism. Huber and Stanig (2011) do not exploit within-country membership in the state church nor within-country changes in church-state separation. To preview our main empirical contributions, (a) the alignment between religious attendance and fiscal conservatism disappears in countries with a state church and the alignment *reverses*—religious attendance predicts increasing support for welfare—if the individual is a *member* of the state church, even controlling for fixed differences across countries and controlling flexibly for individual-level characteristics. The findings are not due to nonlinearities in the relationships and are robust to dropping those who claim no religion. Notably, the documented patterns on welfare attitudes are specific to attitudes towards government *redistribution*, rather than attitudes towards *inequality* more generally. Moreover, the shifts in alignment are mediated specifically through government regulation and *financial support* for specific religions, rather than social regulation and *non-financial* support for religion. We then exploit plausibly exogenous shifts in church-state separation and find that (b) legal precedents that separated church and state preceded fundamentalists identifying strongly as Republican. This is true whether we exploit increases in church-state separation in U.S. Supreme Court jurisprudence or we exploit random variation from the assignment of U.S. Courts of Appeals judges. No lead effects are found. According to our estimates, 10 Supreme Court or 240 Courts of Appeals decisions (20 in every Circuit) would be sufficient, but not necessary, to explain the entire change in the alignment between fundamentalism and the Republican party since 1970, the rise of the Religious Right, and the trend where religious regions of the U.S., once solidly Democratic, became solidly Republican.

Our final analysis leverages a unique opportunity to follow a panel of Scandinavian voters before and after (c) Sweden abolished the state church in 2000, after which religious Swedes became more fiscally conservative relative to religious Norwegians, whose state church remained government financed. Our empirical framework is a differences-in-differences-in-differences design. Notably, as with the cross-country individual-level analysis in (a), we find that the documented patterns on welfare attitudes are, again, specific to government *redistribution*, rather than *inequality* more generally. That said, we are limited by the lack of substantial data to check for pre-trends and have to

define religiosity differently due to data reasons. This survey lacks a measure of fundamentalism or religious attendance. We regress on the available measure of religiosity, a belief that “we should promote a society where Christian values are more prominent”. Prior work has shown that attendance, within-group insurance, donations, and fundamentalism are all highly related (Iannaccone 1998), and in the appendix we also provide evidence that these are highly related when multiple measures are available within the same survey. Overall, we draw on multiple sources of data—Panel Survey of Income Dynamics (PSID), General Social Survey (GSS), World Value Survey (WVS), U.S. State Department reports, World Christian Encyclopedia, U.S. Supreme Court and Circuit Courts legal precedents, and Scandinavian voter panel. Where possible, we make our indicators consistent across datasets and present results using all available indicators in the appendix.

Our paper contributes to a literature on institutional and cultural change that considers the economic incentives behind “why did the West extend the franchise” (Acemoglu and Robinson 2000), “why democracies, where a relatively poor majority holds the political power, do not engage in large-scale expropriation and redistribution” (Bénabou and Ok 2001), and “why have women become left-wing” (Edlund and Pande 2002). Our paper addresses two analogous questions, “why do countries separate church and state” and “why have religious individuals become right-wing”. The lack of a positive relationship between pre-tax inequality and redistribution predicted by standard models has been a puzzle to the political economy of redistribution (Romer 1975; Meltzer and Richard 1983) and social insurance (Moene and Wallerstein 2001, 2003; Lind 2005). Glaeser et al. (2005) models why religion is salient in politics and DeMarzo et al. (2003) models why political positions should map along a single axis, but neither formalize why Republicans and Democrats divide along religious issues the way that they do nor why the divide would change across time and space. Fiorina et al. (2011) and Layman (2001) present general discussions of cultural and religious divides. Jost et al. (2003) proposes that uncertainty aversion explains why fiscal and social conservatism come together (uncertainty aversion is related to risk aversion) but do not explain why they do not come together in some countries or time periods. Roemer (1998) argues that religion distorts the vote of the poor away from high taxes but does not consider church-state separation as an important mediator. Scheve and Stasavage (2006) reject explanations for the alignment between fiscal and social conservatism involving denominational differences, altruism, differences in the making of inferences, issue-bundling, and spurious correlation, which leaves the puzzle open for this paper to address.

Our paper also contributes to a theoretical literature on state church, which has primarily been modeled as impeding a market for religious ideas (Finke and Stark 1992; Iannaccone 1998; and Barro and McCleary 2005). Earlier accounts of church-state separation tended to be descriptive and focused on single factors. For example, the hypothesis that richer countries are less likely to have a state religion fails to explain European countries becoming richer but not dismantling their state religions. The hypothesis that having a state church is due to the statist nature of countries (van Bijsterveld 2000) fails to explain changes within-countries. The hypothesis that religiously homogenous countries are more likely to have a state church (Kuru 2007), formalized by Barro and McCleary (2005) with a Hotelling model, does not explain why some European countries have large Muslim minorities and have not separated church and state. Instead, our paper considers a model for the integral role of a state church in social insurance. Indeed, early Americans followed English poor laws in allowing parish officials the authority to raise taxes to help the poor (Hansan 2011). Belloc et al. (2015) also documents the historical relevance of church-state separation in the transition to self-government in Italian cities. Huber and Stanig (2011) also propose that church-state separation affects redistributive preferences. Unlike their model, our model endogenizes and renders multiple steady states in church-state separation. Our model of legal change takes note that separation of church and state was neither sought nor intended by the founding generation (Hamburger 2002; Feldman 2005), but throughout the twentieth century, historians perpetuated the misperception that the principle of separation was rooted in eighteenth century thought, in order to give historical credence to separation's ostensible constitutional authority and influence contemporary cases to separate church and state (Hamburger 2002). Finally, in parallel work, Bénabou et al. (2015) have recently modeled the redistribution that emerges when a religious state taxes all residents but provides services only to the religious.

We also contribute to explaining the changing nature of religious movements. Prior work has been descriptive (Carter 1956; Bateman 1998; Hood et al. 2005; Woodberry and Smith 1998; Hubbard 1991; Midgley 1990). The descriptions tend to focus on another factor covarying over time: religious pluralism, acceptance of scientific findings, urbanization, new media, legalized abortion via *Roe v. Wade*, the Cold War, the World Wars, and Prohibition. The difficulty these explanations face as general theories is that non-U.S. countries also experienced many of the same societal changes, yet their religious groups are still pro-welfare. Similarly, some of these factors, like *Roe v. Wade*, are

missing in countries where fiscal and social conservatism align.⁷ Our theory provides an explanation more unifying than prior explanations. It allows for heterogeneity *within* and across countries. The seemingly stable shift in religious movements is consistent with a *shift* from one steady-state basin of attraction to another.

The remainder of the paper is organized as follows. Section 2 presents our theory. Section 3 establishes the alignment between fiscal and social conservatism/liberalism and its relation to insurance. Section 4 presents cross-country evidence for the alignment between fiscal and social conservatism/liberalism and its relationship to church-state separation. Section 5 presents within-country evidence from U.S. Establishment Clause jurisprudence. Section 6 presents within-individual evidence from Sweden’s separation of church and state. Section 7 concludes.

2. THEORY

2.1. *Background on Church-State Separation*

Historically,

“charitable church activity has played an important role throughout much of American history. After the Revolutionary War, a large influx of immigrants led to a proliferation of churches that provided social services to their respective ethnic groups. Large revival movements in the early 1800s further increased interactions between religious proselytizers and the needy; this in turn led to new opportunities for church-based philanthropic work. By the early twentieth century, charitable church activity played a vital role in helping the needy, and church social work included a wide variety of activities, such as employment services, hospital visitation, cooperation with government correctional and medical institutions and other social service agencies, advocacy for social causes, educational services such as job training and basic hygienic instruction, and various programs to aid the poor.” (Gruber and Hungerman 2007)⁸

⁷Hout and Fischer (2002) argue that the increase in non-religiosity among moderate political groups is a reaction to the rise of the Religious Right. However, this can only be a reaction to the process we analyze.

⁸In some societies, villagers live so close to subsistence that the community provides subsistence insurance for its members (Scott 1977). Mutual insurance can take in-kind, psychological, or social forms. Frequent churchgoers report larger social networks, more contact with network members, and more types of social support received (Ellison and K.George 1994). Meaningful levels of bidirectional material support exist within religious communities (Maton 1987). In some religious groups, no sick members are without visitors and if members donate, they can receive free services for burial, assistance for new babies or the elderly in their household, and interest-free loans from hundreds to thousands of dollars (Landau 1993).

While the U.S. was founded on the notion of religious practice free from state interference, early Americans did not seek a complete disconnection between church and state, even if their calls for disestablishment lay the groundwork for what would later become calls for separation. Government support for the poor was in fact largely distributed through religious organizations. Early Americans followed English poor laws in allowing parish officials the authority to raise taxes as needed and use the funds to build and manage almshouses; to supply food and sustenance in their own homes for the aged and the handicapped; and to purchase materials necessary to put the able-bodied to work (Hansan 2011).⁹ Church-state separation, as it is understood today in its fiscal dimensions, was neither sought nor intended by the founding generation and did not become an American ideal until late 19th century and 20th century (Feldman 2005).

The secular movement promoting separation of church and state did not begin until the 1920s (Hamburger 2002). In the 20th century, the U.S. Supreme Court forbade religious instruction in public schools, prayer in public schools, direct government assistance to religious schools, and tax deductions and reimbursements for children in religious schools. The secularization of public institutions led to the growth of religious alternatives, like home schooling, which began a resurgence in the 1970s. Today, home schooling involves 3.4% of American school-age children (2 million students). Over 70% of parents who homeschool report doing so in order to provide religious or moral instruction (Sadker et al. 2008). These religious groups would be doubly penalized to pay taxes for public schools and “tuition” for religious instruction outside of schools. The effective reduction in government subsidy of religious instruction—or insurance—is accentuated since home schooling takes one parent, usually the mother, out of the labor force.¹⁰

In 1947, an organization now known as Americans United for Separation of Church and State was founded as Protestants and Other Americans United for Separation of Church and State (POAU)

⁹The controversies at the time of founding were whether government could use its civil power to appoint religious leaders and whether clergymen could participate in politics. Advocates of disestablishment worried that civil office would distract clergyman from focusing on their higher obligations.

¹⁰The fiscal double penalty echoes the earlier experience of Catholics as they began immigrating in large numbers during the 19th century. The reading of the Protestant Bible in public schools discriminated against Catholics, who sent their children to Catholic private schools. Catholics became doubly penalized to pay taxes for Protestant public schools and tuition for Catholic private schools. The ostensibly non-sectarian public institutions spurred the development of Catholic alternatives in the form of children’s homes and parochial schools. In response to subsequent calls for government funding for Catholic schools, 19th century advocates proposed banning public funding of religious institutions (Hamburger 2002). Other ostensibly non-sectarian public institutions, like orphanages, had an implicit intent of getting kids away from Catholic families whose moral and religious instruction in the view of Protestants had been almost wholly neglected (Crenson 2009).

by a coalition of religious, educational and civic elites linking Evangelicals and Mainline Protestants (Schäfer 2013). Howard Pew, a philanthropist who abhorred the New Deal, was instrumental in funding the distribution of laissez-faire economic thought to American Protestant clergy. In discussions with Billy Graham, he helped the founding of *Christianity Today*, now known as evangelicalism’s flagship magazine, in 1956. Prior to that, he funded libertarian magazines mailed to hundreds of thousands of clergy. He lent his support to a variety of associations and higher educational institutions that have been instrumental in the rise of the Religious Right: Billy Graham Evangelistic Association, the National Association of Evangelicals, Fuller Seminary, and Gordon College (Perlstein 2010; Lundin 2013).

Faith-based organizations today supply social services to over 70 million Americans each year (Johnson et al. 2002). Direct government funding of religious organizations remains hotly debated, but tax expenditures are less contested. For example, tax deductions apply to donations to religious organizations while church property, buildings, and clerical salaries and housing are tax exempt, amounting to billions of dollars every year. Tax expenditures amount to \$700 billion per year—or about 6% of GDP in aggregate—for comparison, aggregate government spending is around 25% of GDP (Burman et al. 2008). No direct numbers on tax expenditures specifically for religion exists, but it continues to be litigated under Establishment Clause jurisprudence.¹¹ Religious exemptions appear in many parts of the tax code and many levels of government have fiscal capacity. In our empirical analysis, we will focus on court-made laws that make it harder or easier for governments to authorize fiscal and tax expenditures for religious purposes.

Church-state separation is a continuum from one extreme to another. With a state church, government typically finances building fees and clergy salaries. In the U.S., the average yearly salary of clergy was \$47,540 in 2013 according to the Bureau of Labor Statistics. The average congregation had 75 regular participants and an annual budget of \$90,000 (the average attendee worshipped in a congregation with 400 regular participants and annual budget of \$280,000) (Chaves et al. 2009). Clergy salaries and building fees can therefore be a significant contribution to the church budget

¹¹For example, in *Arizona Christian School Tuition Organization v. Winn et al.*, the Supreme Court allowed Arizona to let taxpayers claim a non-refundable tax credit of \$500 a year (\$1,000 for couples) for donations to qualified school tuition organizations (STOs) that used the funds to make tuition payments to religious private schools. The original suit claimed that STOs violated the First Amendment’s prohibition of government activities promoting the “establishment of religion” because tuition payments could go to parochial schools. In a 5-4 decision, the 2010 Court allowed the tax breaks to continue.

when there is a state church. Furthermore, Hamburger (2002) and Feldman (2005) note that some of the early debates in the U.S. surrounding the separation of church and state involved schooling. About 40 percent of local governments spending goes towards primary and secondary education and 15 percent of all government spending goes towards education (Glaeser 2013). Details of the Swedish church-state separation are in Section 6.

2.2. Intuition

This sub-section briefly summarizes the model. We build a model that incorporates social sanctions (conservatism) that makes ex-post insurance mechanisms, like religion, self-sustaining, and yields the predictions below.¹² At date 0, religiosity and church-state separation are set. At date 1, individuals choose a per-unit income tax τ . Then income is realized and taxes paid to the state. In addition, individuals donate proportion d of their income, where d is interpreted as the individual's level of religiosity. Income is stochastic with mean μ and variance σ^2 . An individual's expected utility, gross of tax and religious donations, is $\mu - \frac{1}{2}\sigma^2$, which can be generated by CARA preferences and income shocks are normally distributed. Risk aversion means that there is a desire for risk sharing, which can occur through redistribution both by the state and by religious groups. Optimal τ is lower when individuals are more religious (high d). The reason is that shocks to income are already smoothed by d , so the marginal benefit of taxation and redistribution is lower when d is high. When a state church exists, proportion γ taxation is redistributed through the religious organization. As γ rises, the optimal taxation increases for individuals who are more religious relative to those who are less religious. Welfare is less competitive against religious groups when government funding can be distributed to religious groups, which explains (1) why fiscal and social conservatism align together in most countries and (2) why fiscal and social conservatism did not align together in the past or in some countries today. With a state church, the elasticity of tax preferences with respect to religious intensity depends on being a member of the state church. Individuals can receive insurance from religious groups or from government, but government support reinforces religious insurance.

Religious intensity and tax preferences are inversely related when there is separation between

¹²Since there are multiple ways to formalize the link between social insurance and political economy, we refer the reader to the appendix.

church and state but religious intensity and tax preferences are positively related when there is no separation. The predictions can be summarized in a simple diagram:

| | $\gamma = 0$ | | $\gamma = 1$ | |
|----------|-----------------|------------|---------------|------------|
| | High τ | Low τ | High τ | Low τ |
| High d | Religious Right | | Social Gospel | |
| Low d | Secular Left | | Libertarian | |

Now suppose there are elites who desire a lower tax burden. Their preferences on church-state separation arguably depend on the relative weight of religious and non-religious constituencies. Elites plausibly desire a lower tax burden (Acemoglu and Robinson 2000) and have the power to choose (or judicate) church-state separation (Bickel 1986). In the U.S., this would be judicial power. See the literature on the counter-majoritarian difficulty whereby judicial review of legislative laws allows unelected judges to overrule the lawmaking of elected representatives and countermand the will of the majority (Bickel 1986). Building on that idea, we endogenize religiosity and church-state separation to explain (3) why some countries sustain high religiosity, high church-state separation, and low welfare state while others sustain low religiosity, low church-state separation, and high welfare state. Elites prefer to separate church and state when the relative number of *religious* voters is large because religious voters will be more fiscally conservative and supportive of low tax rates. A smaller welfare state increases the religious share of the population, since government welfare crowds out religiosity. Countries with many religious voters increase church-state separation and shrink the welfare state, which induces marginal members seeking insurance to become more religious, creating a positive feedback loop. At the other extreme, when the relative number of *non-religious* voters is large, then elites *prefer* a state church so that non-religious voters will be more fiscally conservative, but a smaller welfare state would induce marginal members seeking insurance to become more religious, creating negative feedback. The negative feedback reduces the initial incentive to decrease church-state separation and stabilizes countries with low initial religious population at low religiosity, low church-state separation, and high welfare state. The intuition is summarized in Figure 1.

3. FISCAL AND SOCIAL CONSERVATISM/LIBERALISM

3.1. Individual evidence

We begin with regression analyses of measures of welfare support and social conservatism using the GSS, an annual survey of randomly sampled U.S. residents for their religious attendance, political support for welfare spending, identification with the Republican party, and demographic characteristics such as income, education, and race (1972–2012). We present a single coefficient using the average effect size approach of Kling et al. (2004) and Clingingsmith et al. (2009). The AES averages the normalized effects obtained from a seemingly unrelated regression in which each dependent variable is a question in the index. Normalization is based on the control group, which is no attendance. Results remain qualitatively unchanged if we run regressions on the principal components of the variables. The advantage of the AES approach is that we do not have to impute missing values.

Table I reports regressions of the form:

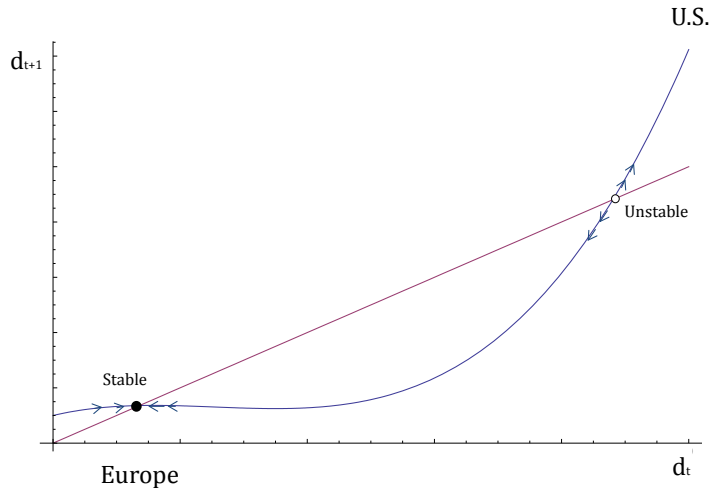
$$FiscalConservatism_i = \beta_0 Religion_i + \beta_1 Fundamentalist_i + \alpha' Controls_i + \varepsilon_i$$

$$MoralConservatism_i = \beta_0 Religion_i + \beta_1 Fundamentalist_i + \alpha' Controls_i + \varepsilon_i$$

$Religion_i$ measures religious attendance and $Fundamentalist_i$ measures whether the respondent is fundamentalist.¹³ $FiscalConservatism_i$ and $MoralConservatism_i$ are attitudes classified by

¹³We report qualitatively similar results from a specification that replaces Fundamentalist with a general index

Figure 1: Multiple Steady States



Ansolabehere et al. (2006) as measuring whether the respondent is fiscally conservative (i.e., favoring low taxes and low government expenditures) and morally conservative (i.e., favoring restrictions on abortion and related issues). Summary statistics are displayed in Appendix Table I. The data appendix discusses variable definitions.

All regressions include regional fixed effects to control for omitted environmental variables that may influence the way political support differs across space. They also include dummies for year, race (instead of controlling for race, we also examine separate sub-samples in the appendix), gender, and controls for log of income,¹⁴ age, age-squared, and years of completed schooling. This baseline specification controls for demographic characteristics that we use across all datasets where possible. When controls are missing, we dummy them out.¹⁵ Except where otherwise noted, all estimates are marginal effects from probit models evaluated at sample means, OLS estimates, or average effect size estimates (Kling et al. 2004).¹⁶ Standard errors are adjusted for correlation within region of residence.¹⁷ All responses have been normalized to have unit standard deviation.

Table I indicates that increasing eight categories of religious attendance from “never attend” to “several times a week” yields an increase in 11% of a standard deviation in fiscal conservatism and 72% of a standard deviation in moral conservatism. Appendix Figure 1 displays the raw data without any controls and indicates that there are no dramatic non-linearities. In words, only 20% of respondents support more welfare; moving eight categories of religious attendance decreases welfare support by 6 percentage points, which is roughly one-third of the baseline. Only 9.4% of respondents identify strongly as Republican; moving eight categories of religious attendance increases strong Republican identification by 4.4 percentage points, almost half of the baseline. Fundamentalists are 5% of a standard deviation more fiscally conservative and 28% of a standard deviation more morally

of Social Conservatism, summing up values on Prayer in Public School, Women Belong at Home, Premarital Sex is Wrong, and Identify as Fundamentalist in Appendix Table VII. The four measures are highly correlated; a factor analysis reveals one dominant factor, where all four variables have about equal factor loadings.

¹⁴Our preferred measure of income is the log of income measured by the REALINC variable in GSS. The raw data collected from respondents is bracketed. REALINC is created by taking the mid-point of the brackets and fitting a Pareto distribution on the top bracket, and then adjusting for inflation. See Ligon (1994) for details. Alternative measures of income have virtually no impact on the estimated parameters on religion.

¹⁵Dummying for missing values means we add an indicator for whether the control is missing and filling in the missing control with a constant. This assumes that controls are missing at random. The same assumption applies were we to drop observations with missing covariates. Dummying out missing values is preferred because it yields greater precision for other control variables that are present in the data.

¹⁶We verify that the OLS estimates and marginal effects from probit models are similar and only present one.

¹⁷Region is state in the GSS.

TABLE I
FISCAL AND SOCIAL CONSERVATISM/LIBERALISM IN THE U.S.—AVERAGE EFFECT SIZES

| | Fiscal conservative | | | Moral conservative | | |
|----------------------|------------------------|-----------------------|------------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Religious attendance | 0.0140*** (0.00195) | | 0.0129*** (0.00198) | 0.0904*** (0.00351) | | 0.0859*** (0.00310) |
| Fundamentalist | | 0.0466*** (0.0104) | 0.0325*** (0.0109) | | 0.277*** (0.0249) | 0.200*** (0.0118) |
| Observations | 54541 | 52971 | 52585 | 56170 | 54593 | 54197 |

Notes:

1. Data are from General Social Survey cumulative file, 1972-2012. All estimates are average effect size estimates. Standard errors in parentheses are adjusted for correlation within region of residence. *, ** and *** denote significance at the 10, 5 and 1% level.

2. All specifications include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.

3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

conservative.¹⁸ Figure 2 presents the individual regressions used in calculating the average effect size.¹⁹ Each point represents a coefficient from a separate regression of one question regarding fiscal or moral conservatism regressed on religious attendance and including the same controls as in Table I. Religious attendance has a positive and significant predictive association with most outcomes. The associations are quantitatively larger for moral conservatism than for fiscal conservatism. These associations are a bit larger among White Americans and weaker among Black Americans (Appendix Table VIII).²⁰

Outside the U.S., religious attendance also predicts fiscal conservatism at the individual-level, but (previewing the relevance of church-state separation) not in countries with a state church (Column

¹⁸Religious attendance and fundamentalism do not seem to reinforce each other. In Appendix Table VI we interact the two. Estimates are small and far from being significant.

¹⁹See Appendix Table IX for the detailed estimates underlying the graph as well as corresponding regressions on the measure of social conservatism.

²⁰Many black churches receive government funding to provide services to their neighborhoods' poorest residents (Owens 2007).

2 of Table III). The regressions²¹ are analogous using the WVS Waves 2-5²², but the coefficients are not strictly comparable because the questions differ.²³ However, religious attendance still predicts social conservatism around the world.²⁴

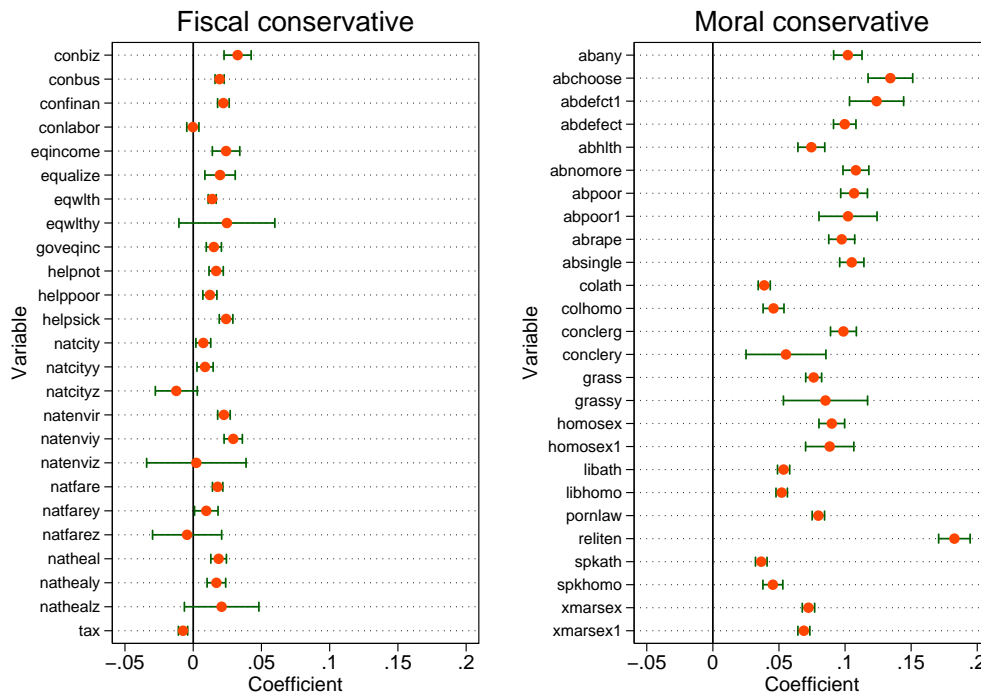
²¹All WVS regressions include regional fixed effects to control for omitted environmental variables that may influence the way political support differs across space. This fixed effects absorb country characteristics like the presence of a state-church and ethnic fragmentation. All specifications also include dummies for year, race, gender, and controls for log of income, age, age-squared, and years of completed schooling (dummies for categories of completed schooling in WVS). When controls are missing, we dummy them out. Except where otherwise noted, all estimates discussed are marginal effects from probit models evaluated at sample means, OLS estimates, or average effect size estimates. We verify that the OLS estimates and marginal effects from probit models are similar and only present one. Standard errors are adjusted for correlation within region of residence. Summary statistics are displayed in Appendix Table III. The data appendix discusses the remaining variable definitions.

²²The only measure of welfare support asked across panel waves is respondents' placing themselves on a scale from "People should take more responsibility for providing for themselves" (coded as 1) to "The state should take more responsibility to ensure that everyone is provided for" (coded as 10). Wave 1 does not ask this question.

²³The GSS asks about government spending on welfare while the WVS asks about government action on poverty. In the GSS, 20% of respondents are pro-welfare, whereas in the WVS, 40% of U.S. respondents are pro-welfare. There are also fewer categories of religious attendance in the WVS. Note that all questions ask about "increases" or "decreases". The GSS and WVS do not ask people for their beliefs about the current level of welfare support.

²⁴Social conservatism in the WVS is measured by questions regarding child obedience/ownership, women's role, sexual activity, and moral absolutism (Appendix Table XVII).

Figure 2: Fiscal and Social Conservatism/Liberalism in the U.S.—All estimates



Notes: The graphs display all the estimated coefficients and their 95% confidence intervals from individual regressions of fiscal/moral conservative attitudes on religious attendance, taking one question at a time. Estimated coefficients are from OLS regressions controlling for the same variables as in Table I. Variable names are those used by GSS and disabbreviated in Appendix Table I. Standard errors are clustered at the region of residence.

3.2. U.S. Denominations

We next present evidence that, not only are religious individuals more socially conservative and fiscally conservative, but denominations that provide more mutual insurance are more socially conservative and fiscally conservative.²⁵ Data on philanthropic giving come from the 2001 Center on Philanthropy Panel Study portion of the Panel Study of Income Dynamics.²⁶ We merge this data with the GSS. The degree of within-group giving varies widely across denominations (Smith 2004). Mormons give 91% of their charitable giving to religion, Evangelical Protestants 82%, Mainline Protestants 62%, Catholics 51%, Other Religions 51%, Jewish 40%, and None 40% (Appendix Table XV).²⁷ The percentage of overall income given to religion also roughly corresponds with the same ordering. Members of denominations with higher degrees of within-denomination giving also attend religious services more frequently than others.²⁸

Figure 3 reports the coefficients on denomination fixed effects from the following regression:

$$WelfareSupport_i = \beta Denomination_i + \alpha' \mathbf{Controls}_i + \varepsilon_i$$

For each fiscal or social attitude, individuals who are members of more conservative denominations report more conservative positions.²⁹ Groups with greater within-group giving, such as Mormons and Evangelical Protestants, are more socially conservative.³⁰ Appendix Table X reports regressions of the form:

$$WelfareSupport_i = \beta WithinGroupGiving_i + \alpha' \mathbf{Controls}_i + \varepsilon_i$$

As one moves 50 percentage points of within-group giving from the lowest (40%) to the highest

²⁵The classification of denominations is based on the RELTRAD method due to Steensland et al. (2000). See <http://www.github.com/thebigbird/ReltradStata> for an updated version of their code.

²⁶The available question of interest is, “Did you make any donations specifically for religious purposes or spiritual development, for example to a church, synagogue, mosque, TV or radio ministry? Please do not include donations to schools, hospitals, and other charities run by religious organizations.” Donations for arts and international aid are excluded by COPPS. COPPS asks other questions for these donation categories.

²⁷Analyzing all waves of the COPPS data show that the within-group giving percentages are very stable over time.

²⁸For attendance more than once a month: Mormon 66%, Evangelical Protestant 56%, Mainline Protestant 57%, Catholic 48%, Other 40%, Jewish 15%, and None 25%.

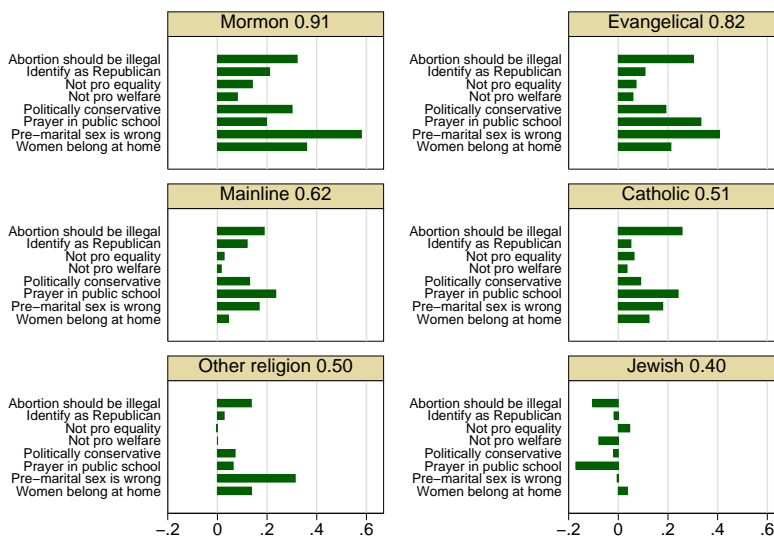
²⁹Appendix Table XIV reports the regressions for all questions.

³⁰They are more fiscally conservative, being less supportive of welfare and equality. They are also more likely to identify as Republican, politically conservative, and fundamentalist. Reasonable data to undertake similar analyses for the worldwide sample are not available in the WVS so we have not been able to do that.

(91%), 20% of a standard deviation in fiscal conservative attitudes and 50% of a standard deviation in moral conservative attitudes are shifted.³¹

Next, we document that members of more conservative denominations, such as Evangelical Protestants, are significantly more likely to receive a great deal of help if ill (57 percent would), than are members of less conservative denominations, such as Jews (only 33 percent would). This suggests the degree of mutual insurance provided by religious groups is associated with social and fiscal conservatism. The available question of interest in the GSS is, "If you were ill, how much would people in your congregation help you out?," and we code the answer, "a great deal" as 1, as opposed to "some," "a little," or "none" (Appendix Table XII).

Figure 3: Fiscal and Social Conservatism/Liberalism in the U.S.—All estimates



3.3. World Denominations

Since we lack individual-level data on charitable contributions in different countries, we employ a different methodology to assess these patterns across countries. We report that religious attendance insures individuals from adverse life shocks, such as unemployment, divorce, or widowhood in the

³¹Results are average effect estimations based on regressions where different opinions are regressed on the fraction of charitable giving that goes to religion. The separate regressions can be found in Appendix Table XI. Individuals who belong to no religion are assigned the value of 40% from the COPPS data.

WVS (Table II Column 1). Clark and Lelkes (2005) used the same adverse life events and found a similar insurance effect.³² Our specification differs as we implement a regression model more akin to the one in Dehejia et al. (2005) but differs in lacking a fiscal measure of insurance. Regressions are of the form:

$$Satisfied_i = \beta_0 Attendance_i + \beta_1 Attendance_i \times LifeEvent_i + \beta_2 LifeEvent_i + \alpha' \mathbf{Controls}_i + \varepsilon_i$$

Table II Column 1 shows that adverse life events reduces satisfaction by 0.46 on a scale from 1-10 (roughly 18% of a standard deviation in life satisfaction). Moving 6 categories of religious attendance from “practically never” to “more than once a week” mitigates about 50% of the effect of a negative shock.

Next, we rerun the specification but estimate a separate degree of insurance for religious attendance in each denomination. Insurance degree is computed as the negative of the ratio of the coefficient on the interaction between attendance and life event and the coefficient on the life event. The final list of denominations and insurance degree is: Catholic (0.088), Islam (0.12), Protestant (0.035), Hindu (0.078), Orthodox (0.065), and Jewish (-0.060).³³ Moving 6 categories of religious attendance yields mitigation ranging from 21% (Protestant) to 74% (Islam).³⁴

Next, we examine the correlation between degree of religious insurance and welfare support and between religious insurance and abortion support. Columns 2 and 3 report regressions of the form:

$$WelfareSupport_{ij} = \beta ReligiousInsurance_j + \alpha' \mathbf{Controls}_{ij} + \varepsilon_{ij}$$

Individuals who belong to religious denominations with a high degree of insurance are more fiscally conservative and more socially conservative. Moving from a denomination that does not insure to one that completely insures decreases support for welfare by roughly 40% of a standard deviation

³²Their unpublished study used one wave of the European Value Survey.

³³Denominations with less than 1000 members are ignored to get meaningful estimates. The negative insurance for Jewish religious participation could be due to small sample and our results are robust to dropping them.

³⁴Some religions view divorce as stigma, which can reduce satisfaction. Our results are robust to removing divorce from the list of life events.

and decreases support for abortion by roughly 30% of a standard deviation.

TABLE II
ATTENDANCE, RELIGIOUS INSURANCE, FISCAL AND SOCIAL CONSERVATISM/LIBERALISM ACROSS COUNTRIES

| | Satisfied (1) | Gov. responsibility (2) | Justifiable: abortion (3) |
|-----------------------|------------------------|----------------------------|------------------------------|
| Attendance | 0.0465*** (0.00675) | | |
| Attendance×Life Event | 0.0367*** (0.00793) | | |
| Life Event | -0.455*** (0.0610) | | |
| Insurance Degree | | -1.274** (0.624) | -0.862*** (0.325) |
| Observations | 231009 | 164662 | 160804 |

Notes:

1. Data are from World Values Survey cumulative file, waves 2-5. All estimates are OLS estimates. Standard errors in parentheses are adjusted for correlation within country of residence. *, ** and *** denote significance at the 10, 5 and 1% level.

2. The question for the Government responsibility variable is “People should take more responsibility to provide for themselves (1) vs. The government should take more responsibility to ensure that everyone is provided for (10).” It is measured on a 1-10 scale. The question for the Abortion justifiable variable refers to “Please tell me whether you think abortion can always be justified (10), never be justified (1), or something in between”. It is measured on a 1-10 scale.

3. Life Event is defined as being unemployed, divorced, or widowed. Insurance Degree is defined as the denomination-specific coefficient on the interaction of Attendance and Life Event from a specification of Column 1 using only data from that denomination.

4. All specifications include dummies for country of residence, survey wave, gender, marital status, and educational attainment category and controls for income, age, and age squared.

5. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

4. CHURCH-STATE SEPARATION ACROSS COUNTRIES

This section presents evidence that a state church affects the alignment between social conservatives and fiscal conservatism. We bring together all useable data sources on church-state separation.³⁵ The ideal measure would be a continuous quantity of fiscal expenditures, tax expenditures, and in-kind expenditures from the state to the church.³⁶ Instead, we use a binary indicator for this

³⁵Another measure of state-church association exists in the Religion and State (RAS) database developed by Fox (2008; 2011). However, his main focus is state involvement in religious life, with less emphasis on favoritism of the state religion. For this reason we have not used his data.

³⁶Fiscal expenditures measure direct transfers of building maintenance and clergy salary, tax expenditures measure

quantity in our cross-country analyses.

Cross-country data come from two sources: (1) the World Christian Encyclopedia³⁷, which is the source for Barro and McCleary (2005), and (2) the U.S. State Department’s International Religious Freedom Reports, which is aggregated by Finke and Grim (2006).³⁸ See Appendix Table XVIII for the list of countries. Descriptive statistics of these indices are shown in Appendix Table IV. We see that there is high consistency between the two data sources as Finke and Grim’s (2006) indices are significantly larger for countries coded with a state church according to the World Christian Encyclopedia.

We regress stated welfare support on religious attendance and attendance interacted with a dummy if the respondent’s country has a state church. Regressions are of the form:

$$WelfareSupport_{ij} = \beta_0 Attendance_{ij} + \beta_1 Attendance_{ij} \times StateChurch_j + \beta_2 StateChurch_j + \alpha' Controls_{ij} + \varepsilon_{ij}$$

The results are shown in Table III. Column 1 simply runs the specification from Table I but for the WVS rather than the GSS. In general, increased church attendance is associated with lower support for government-provided welfare, but the negative relationship is only statistically significant for countries without a state church (Column 2).

Religious attendance is strongly related to less welfare support for most countries of the world, confirming that our proposition holds across a wide range of countries. Strikingly, Figure 4 shows that welfare support declines with religious attendance in most countries for which we have data.³⁹ The bars indicate the coefficient between religious attendance and welfare support for each country in the World Values Survey. Countries that have a negative association between religious attendance

indirect transfers of tax exemptions for charitable donations and tuition for parochial schools, and in-kind expenditures measure religious education substituting for parochial and home schooling that takes parents out of the labor force. Some of these examples are more applicable to certain countries but not others.

³⁷The World Christian Encyclopedia classification of which countries have state churches is largely based on constitutional features (Barrett 1982, Barrett et al. 2001).

³⁸Finke and Grim (2006) classify countries as having a state religion if (a) the constitution designates an official state church and restricts or prohibits other forms of religion, (b) if the government systematically favors a specified religion through subsidies and tax collection, or (c) if the government sanctions teaching of religion in public school. Finke and Grim (2006) also develop indices of government regulation, social regulation, and government favoritism based on what is actually taking place in the country rather than what legal regulations say should be the case.

³⁹Detailed estimates with standard errors and broken down by wave are available in Appendix Table XVI.

TABLE III
FISCAL CONSERVATISM AND CHURCH-STATE SEPARATION ACROSS THE WORLD

| | Gov. responsibility | | | Reduce inequality | | |
|-----------------------------------|-----------------------|-------------------------|-------------------------|----------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Attendance | -0.00883 (0.00534) | -0.0216*** (0.00562) | -0.0181*** (0.00575) | 0.00382 (0.00652) | 0.00480 (0.00897) | 0.00352 (0.00766) |
| Attendance×Has State Church | | 0.0309*** (0.0114) | | | -0.00244 (0.0134) | |
| Attendance×Belong to State Church | | | 0.0420** (0.0161) | | | -0.00327 (0.0131) |
| Belong to State Church | | | -0.304* (0.163) | | | 0.119 (0.117) |
| Observations | 220001 | 220001 | 220001 | 215304 | 215304 | 215304 |

Notes:

1. Data are from World Values Survey cumulative file, waves 2-5. All estimates are OLS estimates. Standard errors in parentheses are adjusted for correlation within country of residence. *, ** and *** denote significance at the 10, 5 and 1% level.

2. The question for the Government responsibility variable is “People should take more responsibility to provide for themselves vs. The government should take more responsibility to ensure that everyone is provided for.” The question for the Reduce inequality variable is “Incomes should be made more equal vs. We need larger income differences as incentives.” Both are measured on a 1-10 scale.

3. All specifications include dummies for country of residence (which absorbs the Has State Church dummy indicator), survey wave, gender, marital status, and educational attainment category and controls for income, age, and age squared.

4. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

5. Data on church-state separation are from Barro and McCleary (2005), which is based on Barrett (1982) and Barrett et al. (2001).

and welfare support are primarily those without a state church (labeled in blue). Countries that have a positive association between religious attendance and welfare support are more often those with a state church (labeled in red).⁴⁰

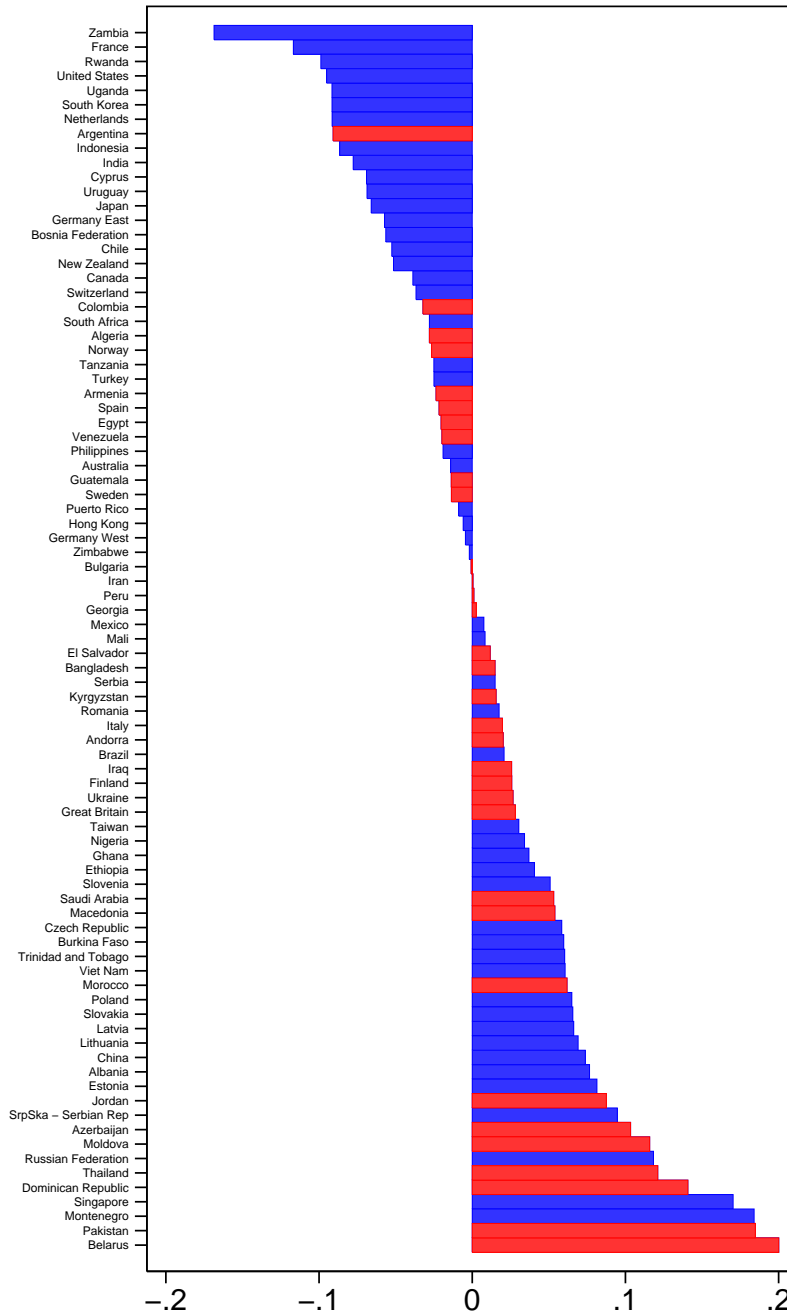
Our theory emphasizes the importance of democratization, in particular, elites cannot disregard the voting preferences of the poor. This is assumed, and the important role of democratization is, strikingly, consistent with the data. The upper-half of Figure 4 is not uniformly blue and the lower-half red. Looking more closely at Figure 4 reveals that almost all of the exceptions in the lower-half are formerly Communist countries, whose elites could disregard the voting preferences of the poor.

Of main interest is whether a state church reduces the negative correlation between religion and welfare support. Column 2 of Table III shows that in countries with a state church, the correlation

⁴⁰In the appendix, we show that religious attendance is strongly correlated with social conservatism.

is about zero. In Column 3, we interact the attendance variable with an indicator for whether the respondent belongs to the denomination of the state church in his or her country:

Figure 4: Welfare Attitudes and Religious Attendance Across the World



Notes: Bars show the magnitude of the association between religious attendance and welfare support. Blue bars indicate countries without a state church and red bars indicate countries with a state church.

$$\begin{aligned}
WelfareSupport_{ij} = & \beta_0 Attendance_{ij} + \beta_1 Attendance_{ij} \times BelongToStateChurch_{ij} \\
& + \beta_2 BelongToStateChurch_{ij} + \alpha' \mathbf{Controls}_{ijt} + \varepsilon_{ij}
\end{aligned}$$

where $BelongToStateChurch_{ij}$ is an indicator of individual i lives in a country j with a state church and belongs to it. Now we see that for members of the state church, attendance is actually associated with more positive attitudes to government welfare. One concern could be that it is not attitudes towards the welfare state, but attitudes towards inequality that drive these opinions. To test this, we examine opinions on economic inequality. Religious attendance has no significant relationship with attitudes towards economic inequality (Columns 4 to 6 of Table III), and this applies to countries both with and without a state church. This suggests that our measure of attitudes towards the welfare state is capturing the government action element more than inequality.

The regressions thus far restrict the marginal effect of going from one category of church attendance to another to be the same across all categories. To consider possible nonlinearities, Figure 5 displays the conditional correlations between welfare support and dummies for each level of religious attendance (the omitted category is no attendance⁴¹). This figure corroborates the findings above. In addition, we can drop individuals who claim no religion and do not attend services and the results are identical. That is, our results are robust to dropping atheists.

Next, we analyze the association between religious attendance and welfare attitudes mediated through different forms of church-state regulation: government regulation, social regulation, and government favoritism.⁴² Finke and Grim (2006) considers government regulation as the most visible form of regulation and the one that receives the most scholarly attention.⁴³ In contrast, social regulation refers to the restrictions placed by other religious groups and is not dependent on the state's action. Government favoritism also involves state action and frequently works in tandem with

⁴¹Note that people can belong to the state church yet not attend services.

⁴²The appendix describes the criteria for these measures.

⁴³They define government regulation as "restrictions placed on the practice, profession, or selection of religion by the official laws, policies, or administrative actions of the state." These restrictions range from prohibitions on conversion and proselytizing to government pamphlets that warn about certain minority religions that may openly appeal to youth. Government restrictions against religions can also come in the form of blatant laws against their existence or more subtle administrative restrictions that limit their operations. Minority religious groups can face zoning restrictions or find it difficult to attain tax-exempt status.

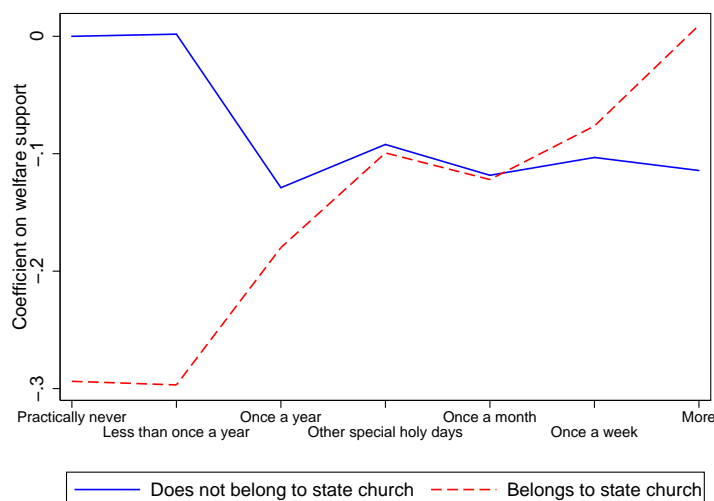
government regulation. We find that each measure appears individually significant in interaction with religious attendance in Table IV.

We also extract a specific question from the Finke and Grim (2006) index that refers to the fiscal dimension of church-state separation: “Government financial support or other privileges for specific religious group”. Column 5 displays a significant interaction slightly larger than the interaction in Column 2, suggesting that government financial support is an important mediator for the effect of church-state separation. However, when all interactions are included together in Column 6, government regulation is the most statistically significant mediator and close in magnitude to the mediation from government financial support. When government regulation reaches 5 (roughly the mean value for countries with a state church according to Barrett et al. (2001)) on the 0-10 index (with 10 being the most regulated), religious attendance predicts more welfare support.

5. U.S. ESTABLISHMENT CLAUSE AND FEDERAL COURTS

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances. (First Amendment to the U.S. Constitution)

Figure 5: Welfare Attitudes and Church-State Separation Across the World



Notes: The solid line indicates the relationship between welfare support and religious attendance for individuals who belong to the state church and the dashed line indicates the relationship for individuals who do not belong to the state church. The regression specification is similar to that of Column 3 in Table III. The category “Only on special holy days/Christmas/Easter days” was only mentioned in Wave 2 and has been merged with the category “Only on special holy days”.

Our quasi-experiment leverages the U.S. common law system where decisions become precedent for future cases in the same jurisdiction. Appendix Table XIX lists all the cases where the Supreme Court either made a decision or let stand a Courts of Appeals decision on church-state separation in public schools.⁴⁴ Appendix Figure 3 shows substantial variation in the net number of decisions each year that increased or decreased separation of church and state. In the federal appellate courts (also known as Circuit Courts⁴⁵), judges are randomly assigned. Moreover, decisions are binding precedent for future cases within the Circuit (there are 12 Circuits, each in charge of a geographic region comprising 4 to 9 U.S. states as seen in Figure 6; cases originate from one of the 94 District courts, numbering 1 to 4 per state). Less than 2% of Circuit cases reach the U.S. Supreme Court, so the Circuit decisions comprise the majority of precedents. Judges are repeatedly randomly assigned to panels of three, and the composition of these panels varies by case.

Newspapers, advocates, and community organizers publicize the change in legal landscape or

⁴⁴Some of these include forbidding religious instruction in public schools (1948), prayer in public schools (1962), Bible recitation in public schools (1963), direct government assistance to religious schools (1971), tax deductions and reimbursements for children in religious schools (1973), display of the Ten Commandments (1980), equal treatment of creation science and evolution (1981), and graduation prayer (1992).

⁴⁵The name, “Circuit”, refers to the fact that judges used to ride a horse in a circuit to reach the entire jurisdiction.

TABLE IV
WELFARE ATTITUDES AND CHURCH-STATE SEPARATION ACROSS THE WORLD

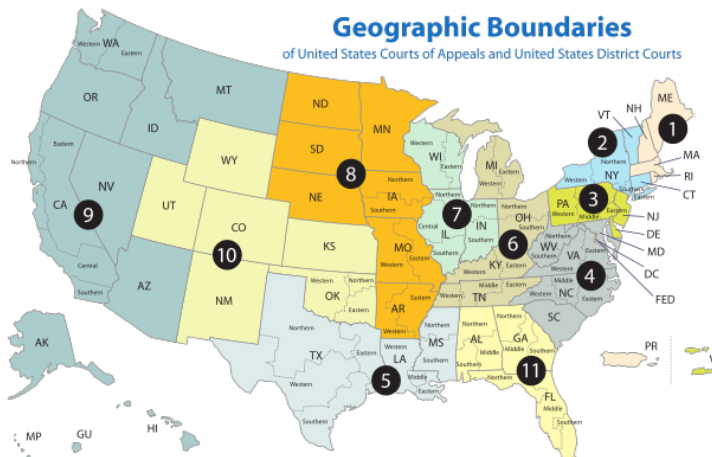
| | (1) | (2) | (3) | (4) | (5) | (6) |
|---|-----------------------|-------------------------|------------------------|-----------------------|-------------------------|------------------------|
| Attendance | -0.00883 (0.00534) | -0.0330*** (0.00718) | -0.0251** (0.00982) | -0.0275** (0.0105) | -0.0338*** (0.00837) | -0.0144 (0.0119) |
| Government Regulation×Attendance | | 0.00668*** (0.00182) | | | | 0.0102*** (0.00310) |
| Social Regulation×Attendance | | | 0.00353* (0.00186) | | | -0.00560* (0.00287) |
| Government Favoritism×Attendance | | | | 0.00347* (0.00193) | | -0.00543 (0.00380) |
| Government Financial Support×Attendance | | | | | 0.00787*** (0.00257) | 0.00816 (0.00539) |
| Observations | 220001 | 214282 | 214282 | 214282 | 214282 | 214282 |

Notes:

1. Outcome variable is “People should take more responsibility to provide for themselves vs The government should take more responsibility to ensure that everyone is provided for.”
2. Explanatory variables are Government Regulation Index, Social Regulation Index, Government Favoritism Index, and Government Financial Support (or other privileges for specific religious group).
3. Controls are as in Table III.
4. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.
5. Standard errors in parentheses are adjusted for correlation within country of residence. *, ** and *** denote significance at the 10, 5 and 1% level.

issue cues after Courts of Appeals decisions (Pastor 2007; Eagle 2007; Sandefur 2005). Since judges follow precedent (Chen et al. 2017) and markets respond to decisions both in Courts of Appeals (Araiza et al. 2014) and the Supreme Court (Katz et al. 2015), we might expect to see an effect of both sets of decisions on social outcomes.

Figure 6



We begin with a simple OLS regression of Supreme Court decisions:

$$\Delta StrongRepublican_Fundamentalism_t = \beta_0 \Delta ChurchStateSeparation_t + \varepsilon_t$$

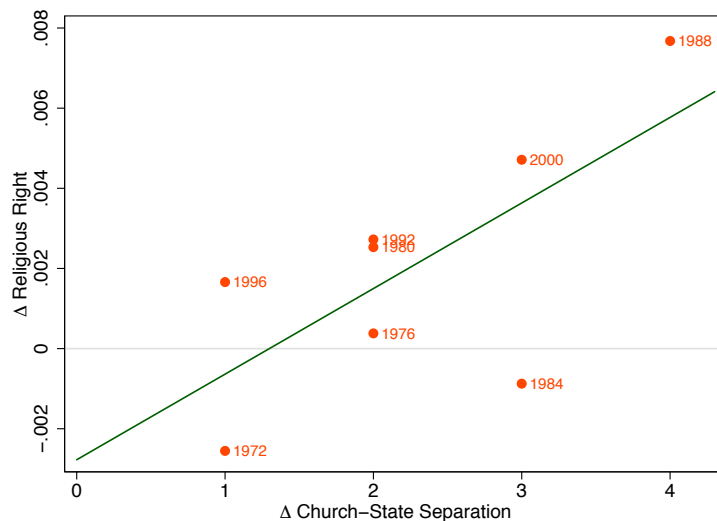
which examines the alignment between religious fundamentalism and identifying strongly as Republican. We find that changes in church-state separation in one electoral cycle precede changes in the relationship between fundamentalism and Republican identification in the next election cycle. β_0 is estimated to be 0.0021(0.0009) and is statistically significant at the 10% level.⁴⁶ We replicate this pattern when examining the correlation between religious attendance and voting for the Republican party Presidential candidate.⁴⁷ Figure 7 presents indicates that outliers do not drive this finding. In terms of magnitudes, roughly 10 Supreme Court decisions would be equivalent to 0.02 in correlation between fundamentalism and identifying strongly as Republican, or roughly the entire change from

⁴⁶A lead regression yields a much smaller and statistically insignificant coefficient of $-0.0009(0.0007)$.

⁴⁷We find that church-state separation precedes 0.0027(0.0010) increase in the correlation between religious attendance and Republican voting, which is statistically significant at the 5% level. A leads regression yields a much smaller and statistically insignificant coefficient of $-0.0005(0.003)$.

1972 to 2004. Figure 8 displays, for each election, the coefficients from regressions of Republican identification on fundamentalism.⁴⁸ This confirms Fogel’s (2000) description of a shift in the alliance between fiscal and social conservatism and assuages concern that Figure 7 is statistical noise.

Figure 7: Church-State Separation and Alignment



Notes: The x-axis displays the net number of judicial decisions that increase or decrease church-state separation in the four years prior to an election year. The y-axis displays the change in the coefficient on the relationship between fundamentalism and identifying strongly as Republican in the next election cycle.

We now turn to the U.S. Courts of Appeals with regional variation and random assignment of judges. To illustrate the identification strategy, Figure 9 shows that excess variation in Democrat judges appears random. Figure 10 shows that there is a strong first stage relationship—Democrats, who are generally more secular and prefer to separate church and state, are less likely to make conservative decisions in Establishment Clause cases. We also employed LASSO to select instruments (Belloni et al. 2012).⁴⁹

Our regression specification examines whether church-state separation causes an increase in the

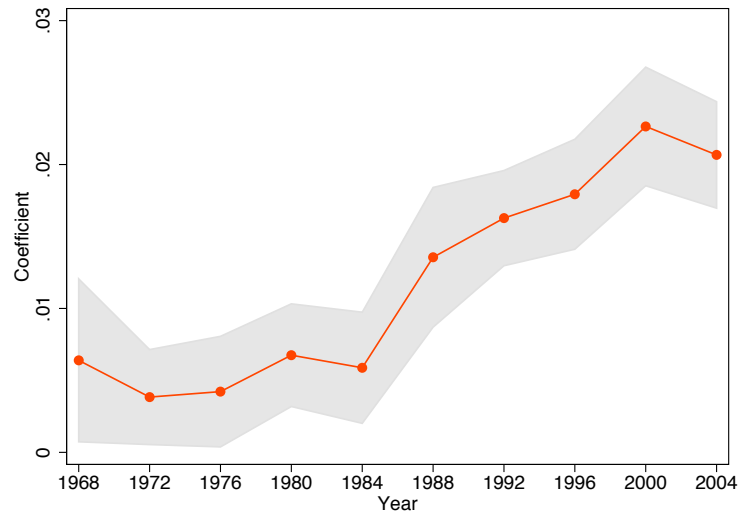
⁴⁸Source is the General Social Survey. Coefficients are from OLS regressions of the dummy for identifying strongly as Republican on fundamentalism, controlling for the same variables listed in Table I. Trends are similar using OLS regressions of the dummy for voting Republican regressed on religious attendance.

⁴⁹To construct our potential LASSO instruments, we use 30 biographical characteristics (Democrat, male, male Democrat, female Republican, minority, black, Jewish, Catholic, No religion, Mainline Protestant, Evangelical, bachelor’s degree (BA) received from same state of appointment, BA from a public institution, JD from a public institution, having an LLM or SJD, elevated from District Court, decade of birth (1910s, 1920s, 1930s, 1940s, or 1950s), appointed when the President and Congress majority were from the same party, ABA score, above median wealth, appointed by president from an opposing party, prior Federal judiciary experience, prior law professor, prior government experience, previous assistant U.S. attorney, and previous U.S. attorney) and their interactions at the judge level (for example, the number of racial minority Democrats per seat) and panel level (for example, the number of Democrats per seat multiplied by the number of racial minority judges per seat). This yields a total of 900 possible instruments.

alignment between fundamentalism and Republican identification:

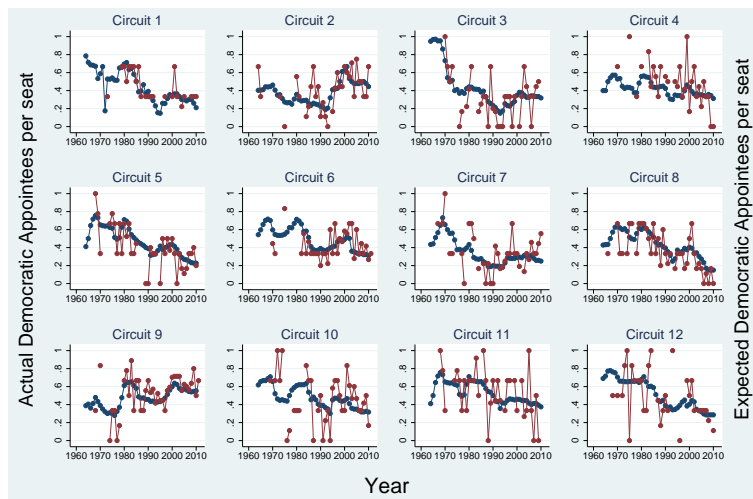
$$Y_{ict} = \beta_0 + \sum_n \beta_{1n} Law_{c(t-n)} + \sum_n \beta_{2n} \mathbf{1}[M_{c(t-n)} > 0] + \sum_n \beta_{3n} Law_{c(t-n)} * F_{ict} + \sum_n \beta_{4n} \mathbf{1}[M_{c(t-n)} > 0] * F_{ict} +$$

Figure 8: Alignment Over Time



Notes: The graph shows for each election year the correlation between fundamentalism and identifying strongly as Republican. The shaded area indicate 95% confidence intervals.

Figure 9: Random Variation by Circuit



Notes: For each Circuit, the expected proportion of judge seats that would be assigned to Democrats is displayed in blue. The actual proportion of judge seats assigned to Democrats is displayed in red.

$$\beta_5 C_c + \beta_6 T_t + \beta_7 C_c * Time + \sum_n \beta_8 W_{c(t-n)} + \beta_9 X_{ict} + \varepsilon_{ict}$$

F_{ict} represents a dummy indicator for fundamentalism. Identifying strongly as Republican is the dependent variable, Y_{ict} for individual i in Circuit c and year t .⁵⁰ We estimate a distributed lag effects of Law_{ct} , which is the percentage of cases in a Circuit-year that voted to separate church and state. Many Circuit-years do not have decisions, so we define Law_{ct} to be 0 when there are no cases and introduce a dummy, $\mathbf{1}[M_{ct} > 0]$, for presence of an appeal. We then interact $Law_{c(t-n)}$ and $\mathbf{1}[M_{c(t-n)} > 0]$ with fundamentalism, so we can observe whether church-state separation precedent is followed by fundamentalists more strongly self-identifying as Republican.⁵¹ We report $\frac{\sum_n \beta_{3n}}{n}$ and joint significance of the lag interaction coefficients.⁵²

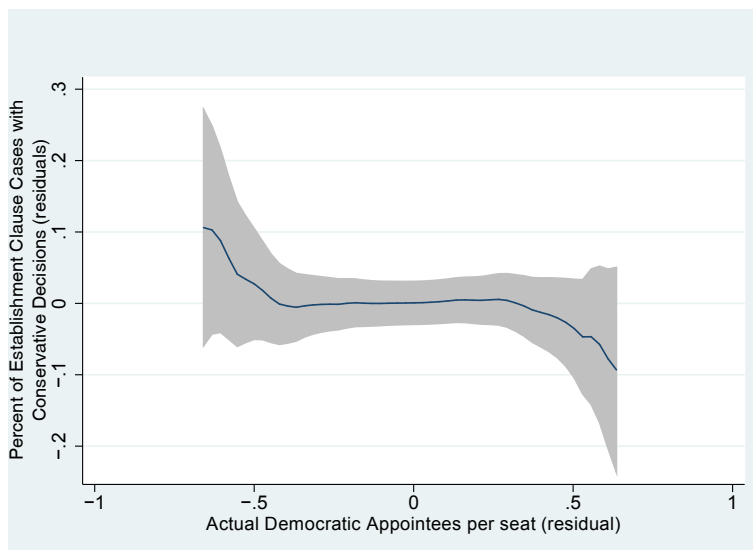
⁵⁰Controls are:

- Circuit-fixed effects, C_c , and time-fixed effects, T_t ;
- Circuit-specific time trends, $C_c * Time$, to allow different Circuits to be on different trajectories with respect to outcomes;
- a vector of observable unit characteristics, X_{ict} , such as age, gender, educational attainment, and race, which each enter as dummies with the exception of age;
- and time-varying Circuit-level controls, $W_{c(t-n)}$, such as the characteristics of the pool of judges available to be assigned in Circuit c and time $t - n$.

⁵¹The instruments are also all interacted with fundamentalism.

⁵²We use random assignment of District Court judges and a corresponding dataset on District cases to identify

Figure 10: Proportion of Establishment Clause Cases with Conservative Decisions



Results are reported in Table V. Both the OLS and IV estimates indicate that after legal precedent separating church and state, fundamentalists began identifying more strongly as Republican in the four years after a decision relative to non-fundamentalists. The lead coefficients are statistically insignificant. In terms of magnitudes, the coefficient of 0.009 is a little under half the size of the coefficient of 0.0021 in the Supreme Court regression. Thus, 2 Circuit Court decisions (in every Circuit)—or 24 Courts of Appeals decisions—is equivalent to 1 Supreme Court decision. 20 Circuit Court decisions in every Circuit—240 Courts of Appeals decisions—or 10 Supreme Court decisions would be equivalent to the entire change in the correlation between fundamentalism and identifying strongly as a Republican from 1972 to 2000.

TABLE V
FISCAL AND SOCIAL CONSERVATISM/LIBERALISM AND CHURCH-STATE SEPARATION WITHIN THE U.S.

| | OLS | LASSO IV | Obs | Dependent Variable |
|--|-------|----------|-------|--------------------|
| <i>Panel A</i> | | | | |
| <i>Average Interaction Lag Effect</i> | (1) | (2) | (3) | (4) |
| Identify as Strong Republican | 0.004 | 0.009 | 42837 | 0.098 |
| Joint P-value | 0.057 | 0.000 | | |
| <i>Panel B</i> | | | | |
| <i>Average Interaction Lead Effect</i> | | | | |
| Identify as Strong Republican | 0.006 | 0.024 | 42837 | 0.098 |
| Joint P-value | 0.260 | 0.291 | | |

Notes: Interaction with fundamentalism. Regressions include level effects, circuit fixed effects, year fixed effects, circuit-specific time trends, a dummy for whether there were no cases in that circuit-year, and individual demographic controls.

6. SWEDISH SEPARATION OF CHURCH AND STATE

In Sweden and Norway, Scandinavian governments have funded state churches and appointed their bishops since at least the Reformation. On January 1, 2000, Sweden separated church and state. This separation had two main fiscal effects. First, the church was required to cut its \$1.68 billion annual budget, most of which was collected through state taxes. Second, individuals outside the Church of Sweden were no longer required to pay church taxes (Ekström 2003, 214) and children

$\mathbf{1}[M_{ct} > 0]$: District judge demographic characteristics are correlated with reversal rates (Haire, Songer and Lindquist 2003; Sen 2011; Barondes 2010; Steinbuch 2009); and expected reversal rates could encourage litigants from pursuing an appeal. The use of leads serves as an important omnibus check of our instrumental variable. We show average lag and lead effects to assess the degree to which violation of random variation biases our estimates.

of members of the Church of Sweden no longer automatically became members.⁵³ Approximately 2% of the Swedish population regularly attends Sunday services, whose church activities and insurance functions are effectively funded by the payment of taxes (from the entire population before 2000 and from only church members afterwards). In 2000, 83% of the population were church members.⁵⁴ Thus, the 2000 separation meant that the 17% of the population who were outside the Church of Sweden no longer subsidized the 2%.⁵⁵ Separation of state and church in Scandinavia, even though not adjudicated, was not really a matter of popular vote. There was little popular debate; instead, a long series of committee reports were issued between church and government (Rasmussen 2007, 1).⁵⁶ In the end, the decision was taken by a small group at the top of the party.⁵⁷

Our final analysis examines the impact of Sweden’s state church separation on the relationship between religiosity and redistributive preferences in a panel of voters followed before and after the separation.⁵⁸ Table VI reports differences-in-differences-in-differences regressions where the control group is Norway, whose church is still state-financed (Thorildsen 2012). We compare Norway and Sweden because they are culturally similar so may experience similar time trends. We are interested in the two available measures of redistributive preferences: 1) should taxes on high incomes be reduced and 2) should income differences be reduced? The former captures government involvement while the latter does not, so it serves as a placebo, as in our WVS analysis. The available religiosity measure is: “we should promote a society where Christian values are more prominent”. This question was only asked in the Norwegian data from 1997 onwards, preventing us from doing the usual check for pre-trends and reducing the length of the Norwegian part of the panel.⁵⁹

We find that church-state separation reduced the correlation between Christian values and redistributive preferences. Religiosity and redistributive preferences are only weakly correlated in general (Column 1). However, religious Swedes after church-state separation became more fiscally conservative relative to religious Norwegians (Column 2). One standard deviation in Christian val-

⁵³Children became members only if they were baptized (Brohed 2005, Ch. 20 and 26).

⁵⁴<https://www.svenskakyrkan.se/statistik>

⁵⁵By 2015, an additional fifth of the population left the Church of Sweden. Thus, the budget reduction experienced in 2000 may have been larger if the future reduction in church membership was anticipated, annuitized to the year 2000, or if non-members were wealthier than average.

⁵⁶Debate, if any, was mainly within the Church of Sweden. The Centre party (*Centern*) was the only political party voicing any real disagreement (Ekström 2003, 223).

⁵⁷See Ekström (2003) and Gustafsson (2003) for detailed accounts.

⁵⁸Appendix Table V presents descriptive statistics of our panel of Scandinavian voters.

⁵⁹Shortening the sample for Sweden to the same time period gives similar but less precise estimates than the ones presented in Table VI.

ues corresponds to 12% of a standard deviation in support for taxes. Our findings are robust to exploiting the panel aspect of the data: including individual fixed effects yields similar inferences (Columns 3 and 4).⁶⁰ Our results are also robust to using only data just before and just after the 2000 abolition. Column 5 regresses post-abolition redistributive preferences on pre-abolition Christian values interacted with being Swedish, controlling for pre-abolition redistributive preferences. In sum, Swedes with strong Christian values became more fiscally conservative after abolition.

Using the placebo question, we find that church-state separation reduced the correlation between Christian values and redistributive preferences only when government is involved. Religious Swedes after church-state separation became less accepting of income differences relative to religious Norwegians (Column 7), which is robust to the inclusion of individual fixed effects (Column 9). We can reject significant increases among religious Swedes in Column 10.⁶¹ This analysis of Sweden’s separation of church and state is consistent with our WVS cross-country analysis.⁶²

7. CONCLUSION

The recent rise in religious intensity in U.S. popular and public discourse has been termed the “Fourth Great Awakening” (Fogel 2000). Membership in mainline Protestant churches declined, while the membership and influence of conservative denominations grew rapidly. The recent period has also seen the rise of megachurches and cultural battles over gay rights, abortion, and creationism, to name a few issues that have mobilized the Religious Right.

Religious intensity as social insurance may explain why fiscal and social conservatives and fiscal and social liberals tend to come hand-in-hand. We present evidence consistent with this hypothesis. Fiscal and social conservatism and fiscal and social liberalism are correlated at the individual level within countries. Religious groups with greater within-group giving are more against the welfare state and more socially conservative. The relationship between fiscal and social attitudes is reversed for members of the state church: religious intensity predicts welfare support if the individual is a member of the state church. Increases in church-state separation precede increases in the political alliance between religiosity and Republican voting.

⁶⁰That is, we can examine changes in redistributive preferences for religious Swedes relative to religious Norwegians, since individual voters are followed over two waves of the survey.

⁶¹We are unable to do another placebo where we use data from 1994 and 1998 and consider 1996 as the “treatment” year because the question for Christian values was not available in the Norwegian survey before 1996.

⁶²As a further check, our WVS analysis is robust to recoding Sweden as having no state church after 2000. Estimates using only Swedish data are less precise but have the same sign as our panel analysis.

Countries can also permanently shift from one steady state to another with shifts in volatility. For example, if elites gain better access to credit markets (Hirschman 1982; Banerjee et al. 2006), they may desire a lower tax burden and have incentives to increase church-state separation, which creates a larger voting constituency for lower taxes.⁶³ On the other hand, if elites are restricted from international capital markets and lose access to alternative social insurance, economic sanctions may increase theocratic tendencies in countries with large religious populations. In this policy scenario, the story reverses: elites decrease church-state separation if religious voters exceed non-religious ones. Preferences for redistribution are high and social insurance by religious groups completes a missing market for credit. Indeed, economic sanctions are usually ineffective (Naghavi and Pignataro 2015; Hufbauer et al. 2007). Future research may shed light on the dynamics of credit market access, theocracy, and fundamentalism in developing countries or in historical settings such as those studied by Ager and Ciccone (2014) and Bentzen (2015) on volatility and religiosity.

⁶³We find some suggestive evidence of credit markets precipitating church-state separation using Barro and Mc-Cleary's (2005) data. Countries that founded a stock market at an earlier date are less likely to have a state church.

Table VI: Preferences and State Church: Sweden vs. Norway

| | Reduce taxes | | | | | Accept income differences | | | | |
|--|--------------------|-----------------------|----------------------|-----------------------|-----------------------|---------------------------|-----------------------|--------------------|----------------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Christian values | 0.0242 (0.0177) | 0.0452 (0.0299) | -0.00501 (0.0199) | 0.111** (0.0462) | | 0.0264*** (0.00775) | -0.0309* (0.0167) | 0.0232 (0.0222) | -0.0356 (0.0473) | |
| Christian values \times Sweden | | 0.0373 (0.0338) | | -0.0755 (0.0536) | | | 0.0966*** (0.0216) | | 0.0665 (0.0558) | |
| Christian values \times After 2000 | | -0.124*** (0.0240) | | -0.174*** (0.0466) | | | 0.0663*** (0.0203) | | 0.0883* (0.0481) | |
| After 2000 \times Sweden | | -0.844*** (0.0951) | | -0.952*** (0.201) | | | 0.376*** (0.111) | | 0.453** (0.209) | |
| Christian values \times After 2000 \times Sweden | | 0.121*** (0.0299) | | 0.138** (0.0543) | | | -0.141*** (0.0310) | | -0.132** (0.0580) | |
| Cut taxes (lagged) | | | | | 0.374*** (0.0360) | | | | | |
| Accept income differences (lagged) | | | | | | | | | | 0.327*** (0.0232) |
| Christian values (lagged) | | | | | -0.124*** (0.0254) | | | | | 0.0363 (0.0282) |
| Christian values (lagged) \times Sweden | | | | | 0.141*** (0.0289) | | | | | -0.0309 (0.0192) |
| FE | No | No | Yes | Yes | No | No | No | Yes | Yes | No |
| Observations | 16009 | 16009 | 16009 | 16009 | 1312 | 15988 | 15988 | 15988 | 15988 | 1322 |

Notes:

1. The outcome variable in Columns 1 to 5 is the index of favoring tax cuts, in Columns 6 to 10, the index of accepting income differentials. Both indices take values between 1 and 5.
2. Christian values is an index between 1 and 5 measuring whether "we should promote a society where Christian values are more prominent".
3. All specifications include period and country dummies. Specifications (3), (4), (8), and (9) also include individual fixed effects. Specifications (5) and (10) are regressions of opinions next period, conditioning on opinions this period. Data covers the Swedish elections in 1991, 1994, 1998, 2002, and 2006 and the Norwegian elections in 1997, 2001, and 2005.
4. Standard errors in parentheses are adjusted for correlation within region of residence. *, ** and *** denote significance at the 10, 5 and 1% level.

REFERENCES

- Aardal, Bernt, Maria Høstmark, Bengt Oscar Lagerstrøm, and Guro Stavn**, “Valgundersøkelsen 2005. Dokumentasjon- og tabellrapport,” 2007. Rapporter 2007/31, Statistics Norway.
- Acemoglu, Daron and James A. Robinson**, “Why Did The West Extend The Franchise? Democracy, Inequality, And Growth In Historical Perspective,” *The Quarterly Journal of Economics*, November 2000, *115* (4), 1167–1199.
- Ager, Philipp and Antonio Ciccone**, “Agricultural risk and the spread of religious communities,” 2014.
- Alley, Robert S.**, *The Supreme Court on Church and State*, Oxford University Press, May 1988.
- , *The Constitution & Religion: Leading Supreme Court Cases on Church and State*, Prometheus Books, October 1999.
- Alvarez, Fernando and Urban J. Jermann**, “Efficiency, Equilibrium, and Asset Pricing with Risk of Default,” *Econometrica*, July 2000, *68* (4), 775–797.
- Ansolabehere, Stephen, Jonathan Rodden, and James M. Snyder Jr.**, “Purple America,” *The Journal of Economic Perspectives*, 2006, *20* (2), 97–118.
- Araiza, Alberto G., Daniel L. Chen, and Susan Yeh**, “Does Appellate Precedent Matter? Stock Price Responses to Appellate Court Decisions on FCC Actions,” in Yun chien Chang, ed., *Empirical Legal Analysis: Assessing the Performance of Legal Institutions*, Vol. 19 of *Economics of Legal Relationships*, Routledge, 2014.
- Banerjee, Abhijit Vinayak, Roland Béabou, and Dilip Mookherjee eds.**, *Understanding Poverty*, New York: Oxford University Press, 2006.
- Barondes, Royce De Rohan**, “Federal District Judge Gender and Reversals,” in “5th Annual Conference on Empirical Legal Studies Paper” Working Paper 15 July 2010.
- Barrett, D. B.**, *World Christian Encyclopedia*, 1 ed., Oxford University Press, 1982.
- Barrett, David B., George T. Kurian, and Todd M. Johnson**, *World Christian Encyclopedia: A Comparative Survey of Churches and Religions in the Modern World* World Christian Encyclopedia: A Comparative Survey of Churches and Religions in the Modern World, 2 ed., Oxford University Press, 2001.
- Barro, Robert J. and Rachel M. McCleary**, “Which Countries Have State Religions?,” *Quarterly Journal of Economics*, 2005, *120* (4), 1331–1370.
- Bateman, Bradley W.**, “Clearing the Ground: The Demise of the Social Gospel Movement and the Rise of Neoclassicism in American Economics,” in “The Transformation of American Economics: From Interwar Pluralism to Postwar Neoclassicism,” Vol. 30 of *History of Political Economy Annual Supplement*, Mary S. Morgan and Malcolm Rutherford, 1998, pp. 29 – 52.
- Belloc, Marianna, Francesco Drago, and Roberto Galbiati**, “Earthquakes, Religion, and Transition to Self-Government in Italian Cities,” 2015.
- Belloni, Alex, Daniel L. Chen, Victor Chernozhukov, and Chris Hansen**, “Sparse Models and Methods for Optimal Instruments with an Application to Eminent Domain,” *Econometrica*, November 2012, *80* (6), 2369–2429.
- Bénabou, Roland and Efe A. Ok**, “Social Mobility and the Demand for Redistribution: The Poup Hypothesis,” *The Quarterly Journal of Economics*, 2001, *116* (2), 447–487.

- Bénabou, Roland, Davide Ticchi, and Andrea Vindigni**, “Forbidden fruits: the political economy of science, religion, and growth,” 2015.
- Bentzen, Jeanet Sinding**, “Acts of God? Religiosity and Natural Disasters Across Subnational World Districts,” *Univ. of Copenhagen Dept. of Economics Discussion Paper*, 2015, (15-06).
- Bergman, Torbjorn and Niklas Bolin**, “Swedish Democracy. Crumbling Political Parties, a Feeble Riksdag, and Technocratic Power Holders?,” in Torbjorn Bergman and Kaare Strøm, eds., *The Madisonian Turn: Political Parties and Parliamentary Democracy in Nordic Europe*, The University of Michigan Press, 2011.
- Berman, Eli**, “Sect, Subsidy, and Sacrifice: An Economist’s View of Ultra-Orthodox Jews,” *The Quarterly Journal of Economics*, 2000, 115 (3), 905–953.
- Bickel, Alexander M**, *The least dangerous branch: the Supreme Court at the bar of politics*, Yale University Press, 1986.
- Biddle, Jeff**, “Religious Organizations,” in Charles T. Clotfelter, ed., *Who Benefits from the Nonprofit Sector?*, University of Chicago Press, 1992.
- Boodman, Sandra G.**, “Seeking Divine Protection; Some Believers Put Faith in Church Plans Instead of Standard Health Insurance,” *The Washington Post*, October 25 2005, p. HE01.
- Brohed, Ingmar**, *Sveriges kyrkohistoria. Religionsfrihtens och ekumenikens tid*, Vol. 8, Stockholm: Verbum, 2005.
- Buchanan, James M**, “An economic theory of clubs,” *Economica*, 1965, 32 (125), 1–14.
- Burman, Leonard E, Christopher Geissler, and Eric J Toder**, “How big are total individual income tax expenditures, and who benefits from them?,” *The American Economic Review*, 2008, 98 (2), 79–83.
- Cadge, Wendy and Robert Wuthnow**, “Religion and the Nonprofit Sector,” in Walter W. Powell and Richard Steinberg, eds., *The Nonprofit Sector: A Research Handbook*, 2 ed., Yale University Press, 2006, chapter Religion and the Nonprofit Sector, pp. 485–505.
- Carter, Paul Allen**, *The Decline and Revival of the Social Gospel: Social and Political Liberalism in American Protestant Churches, 1920-1940*, Cornell University Press, 1956.
- Cavanaugh, Jeffrey M.**, “Unholy Alliance or a Match Made in Heaven? Welfare State Outcomes, the Economics of Religion, and the Logic of Conservative Political Coalitions,” Working Paper, University of Illinois at Urbana-Champaign Mimeo 2005. Presented at the Fourth Annual Meeting of the Association for the Study of Religion, Economics, and Culture, Rochester, NY Nov. 4-6, 2005.
- Chaves, Mark, Shawna Anderson, and Jason Byassee**, “American Congregations at the Beginning of the 21st Century,” National Congregations Study Report 2009.
- Chen, Daniel L.**, “Club Goods and Group Identity: Evidence from Islamic Resurgence during the Indonesian Financial Crisis,” *The Journal of Political Economy*, April 2010, 118 (2), 300–354.
- , **Jens Frankenreiter, and Susan Yeh**, “Judicial Compliance in District Courts,” *Economic Inquiry*, 2017. invited to resubmit, TSE Working Paper No. 16-715.
- Clark, Andrew and Orsolya Lelkes**, “Deliver Us from Evil: Religion as Insurance,” Working Paper 43, Paris-Jourdan Sciences Economiques Mimeo February 2005.

- Clingingsmith, David, Asim Ijaz Khwaja, and Michael Kremer**, “Estimating the Impact of The Hajj: Religion and Tolerance in Islam’s Global Gathering,” *The Quarterly Journal of Economics*, 2009, 124 (3), 1133–1170.
- Cnaan, Ram A., Stephanie C. Boddie, Femida Handy, Gaynor Yancey, and Richard Schneider**, *The Invisible Caring Hand: American Congregations and the Provision of Welfare*, New York University Press, 2002.
- Coate, Stephen and Martin Ravallion**, “Reciprocity without Commitment: Characterization and Performance of Informal Insurance Arrangements,” *Journal of Developmental Economics*, February 1993, 40 (1), 1–24.
- Converse, Philip E.**, “The Nature of Belief Systems in Mass Publics,” in David E. Apter, ed., *Ideology and Discontent*, Free Press of Glencoe, 1964, chapter The Nature of Beliefs Systems in Mass Publics, p. 342.
- Crenson, Matthew A.**, *Building the invisible orphanage: A prehistory of the American welfare system*, Harvard University Press, 2009.
- Dehejia, Rajeev, Thomas DeLeire, and Erzo F. P. Luttmer**, “Insuring Consumption and Happiness Through Religious Organizations,” Working Paper 11576, National Bureau of Economic Research August 2005.
- DeMarzo, Peter M., Dimitri Vayanos, and Jeffrey Zwiebel**, “Persuasion Bias, Social Influence, and Unidimensional Opinions,” *The Quarterly Journal of Economics*, August 2003, 118 (3), 909–968.
- Eagle, Steven J.**, “Does Blight Really Justify Condemnation?,” *Urban Lawyer*, 2007, 39, 833–858.
- Edlund, Lena and Rohini Pande**, “Why Have Women Become Left-Wing? The Political Gender Gap and the Decline in Marriage,” *The Quarterly Journal of Economics*, 2002, 117 (3), 917–961.
- Ekström, Sören**, *Makten över kyrkan. Om Svenska kyrkan, folket och staten*, Stockholm: Verbum, 2003.
- Ellison, Christopher and Linda K. George**, “Religious Involvement, Social Ties, and Social Support in a Southeastern Community,” *Journal for the Scientific Study of Religion*, March 1994, 33 (1), 46–61.
- Ellsworth, L.**, “Mutual Insurance and Non-Market Transactions Among Farmers in Burkina Faso,” Unpublished ph.d. thesis, University of Wisconsin 1989.
- Fafchamps, Marcel**, *Rural Poverty, Risk, and Development*, Edward Elgar Publishing, Inc., 2004.
- Feldman, Noah**, *Divided by God: America’s Church-State Problem— and What We Should Do about it*, Farrar, Straus and Giroux, July 2005.
- Fernandez, Phil, Eric S. Purcell, Kurt Rinear, and Rorri Wiesinger**, *God, Government, and the Road to Tyranny*, Xulon Press, 2003.
- Finke, Roger and Brian J. Grim**, “International Religion Indexes: Government Regulation, Government Favoritism, and Social Regulation of Religion,” *Interdisciplinary Journal of Research on Religion*, 2006, 2 (1), 1–40.
- and **Rodney Stark**, *The Churching of America, 1776-1990: Winners and Losers in Our Religious Economy*, Rutgers University Press, 1992.
- Fiorina, Morris P., Samuel J. Abrams, and Jeremy C. Pope**, *Culture War?: The Myth of a Polarized America* Great questions in politics series, Pearson, 2011.
- Fogel, Robert Wiliam**, *The Fourth Great Awakening and the Future of Egalitarianism* Morality and Society Series, University of Chicago Press, 2000.
- Fox, Jonathan**, *A World Survey of Religion and the State*, Cambridge University Press, 2008.

- , “Building Composite Measures of Religion and State,” *Interdisciplinary Journal of Research on Religion*, 2011, 7, Article 8.
- Genicot, Garance and Debraj Ray**, “Group Formation in Risk-Sharing Arrangements,” *Review of Economic Studies*, 2003, 70 (1), 87–113.
- Gill, Anthony and Erik Lundsgaarde**, “State Welfare Spending and Religiosity: A Cross-National Analysis,” *Rationality and Society*, 2004, 16 (4), 399–436.
- Glaeser, Edward L.**, “Urban Public Finance,” *Handbook of Public Economics*, 2013, 5, 195.
- Glaeser, Edward L., Giacomo A. M. Ponzetto, and Jesse M. Shapiro**, “Strategic Extremism: Why Republicans and Democrats Divide on Religious Values,” *The Quarterly Journal of Economics*, 2005, 120 (4), 1283–1330.
- Gruber, Jonathan and Daniel M. Hungerman**, “Faith-Based Charity and Crowd-Out During the Great Depression,” *Journal of Public Economics*, 2007, 91 (5), 1043–1069.
- Gustafsson, Göran**, “Church-state separation Swedish-style,” *West European Politics*, 2003, 26 (1), 51–72.
- Haire, Susan B., Donald R. Songer, and Stefanie A. Lindquist**, “Appellate Court Supervision in the Federal Judiciary: A Hierarchical Perspective,” *Law & Society Review*, March 2003, 37 (1), 143–168.
- Hall, Kermit L.**, *The Oxford Guide to United States Supreme Court Decisions*, Oxford University Press, 1999.
- and **James W. Ely Jr.**, *The Oxford Guide to United States Supreme Court Decisions*, Oxford University Press, 2009.
- Hamburger, Philip**, *Separation of Church and State*, Harvard University Press, March 2002.
- Hansan, J. E.**, “Poor relief in early America,” Retrieved Feb 26, 2016 from <http://www.socialwelfarehistory.com/programs/poor-relief/>, 2011.
- Hirschman, Albert O.**, “Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble?,” *Journal of Economic Literature*, 1982, 20 (4), 1463–1484.
- Hood, Ralph W., Peter C. Hill, and W. Paul Williamson**, *The Psychology of Religious Fundamentalism*, The Guilford Press, 2005.
- Hornberger, Jacob**, “Serfs on the Plantation, Part 4,” *Freedom Daily*, September 1993, p. 1.
- Hout, Michael and Claude S. Fischer**, “Why More Americans Have No Religious Preference: Politics and Generations,” *American Sociological Review*, 2002, 67 (2), 165–190.
- Hubbard, David A.**, *What We Evangelicals Believe*, Fuller Seminary Press, January 1991.
- Huber, John D. and Piero Stanig**, “Church-State Separation and Redistribution,” *Journal of Public Economics*, August 2011, 95 (7-8), 828–836.
- Hufbauer, Gary Clyde, Jeffrey J Schott, Kimberly Ann Elliott, and Barbara Oegg**, *Economic sanctions reconsidered: 3rd edition*, Peterson Institute, 2007.
- Hungerman, Daniel M.**, “Are Church and State Substitutes? Evidence from the 1996 Welfare Reform,” *Journal of Public Economics*, December 2005, 89 (11-12), 2245–2267.
- Iannaccone, Laurence R.**, “Introduction to the Economics of Religion,” *Journal of Economic Literature*, September 1998, 36, 1465–1496.

- Johnson, Byron R, Ralph Brett Tompkins, and Derek Webb**, *Objective hope: Assessing the effectiveness of faith-based organizations: A review of the literature*, Center for Research on Religion and Urban Civil Society Philadelphia, 2002.
- Jost, John T., Jack Glaser, Arie W. Kruglanski, and Frank J. Sulloway**, “Political Conservatism as Motivated Social Cognition,” *Psychological Bulletin*, 2003, 129 (3), 339–375.
- Katz, Daniel Martin, Michael James Bommarito, Tyler Soellinger, and James Ming Chen**, “Law on the Market? Evaluating the Securities Market Impact of Supreme Court Decisions,” *Evaluating the Securities Market Impact of Supreme Court Decisions (August 24, 2015)*, 2015.
- Kling, Jeffrey R., Jeffrey B. Liebman, Lawrence F. Katz, and Lisa Sanbonmatsu**, “Moving to Opportunity and Tranquility: Neighborhood Effects on Adult Economic Self-Sufficiency and Health from a Randomized Housing Voucher Experiment,” 2004. KSG Working Paper No. RWP04-035.
- Kocherlakota, Narayana R.**, “Implications of Efficient Risk Sharing without Commitment,” *Review of Economic Studies*, October 1996, 63 (4), 595–609.
- Krueger, Dirk and Fabrizio Perri**, “Does Income Inequality Lead to Consumption Inequality? Evidence and Theory,” *Review of Economic Studies*, 2002, 73 (1), 163–193.
- Kuru, Ahmet T.**, “Passive and Assertive Secularism: Historical Conditions, Ideological Struggles, and State Policies toward Religion,” *World of Politics*, 2007, 59, 568–594.
- Landau, David**, *Piety and Power, the World of Jewish Fundamentalism*, Hill and Wang, 1993.
- Layman, Geoffrey**, *The Great Divide: Religious and Cultural Conflict in American Party Politics Power, Conflict, and Democracy : American Politics into the Twenty-First Century*, Columbia University Press, 2001.
- Ligon, Ethan**, “The Development and Use of a Consistent Income Measure for the General Social Survey,” GSS Methodological Report 64, NORC, University of Chicago 1994.
- Lind, Jo Thori**, “Why is There so Little Redistribution?,” *Nordic Journal of Political Economy*, 2005, 31, 111–125.
- Lindbeck, Assar and Jörgen W Weibull**, “Balanced-budget redistribution as the outcome of political competition,” *Public choice*, 1987, 52 (3), 273–297.
- Lizza, Ryan**, “‘God’s Politics’: The Religious Left,” *The New York Times*, February 6 2005.
- Lundin, Roger**, *Christ Across the Disciplines: Past, Present, Future*, Wm. B. Eerdmans Publishing, 2013.
- Luttmer, Erzo FP et al.**, “Group loyalty and the taste for redistribution,” *Journal of political Economy*, 2001, 109 (3), 500–528.
- Marshall, William P**, “Limits of Secularism: Public Religious Expression in Moments of National Crisis and Tragedy, The,” *Notre Dame L. Rev.*, 2002, 78, 11.
- Maton, Kenneth I.**, “Patterns and Psychological Correlates of Material Support Within a Religious Setting: The Bidirectional Support Hypothesis,” *American Journal of Community Psychology*, 1987, 15 (2), 185–207.
- Meltzer, Allan H. and Scott F. Richard**, “Tests of a Rational Theory of the Size of Government,” *Public Choice*, 1983, 41, 403–418.
- Midgley, James**, “The New Christian Right, Social Policy and the Welfare State,” *Journal of Sociology and Social*

- Welfare*, 1990, 17, 89–106.
- Moene, Karl Ove and Michael Wallerstein**, “Inequality, Social Insurance, and Redistribution,” *American Political Science Review*, December 2001, 95 (4), 859–874.
- and ———, “Earnings Inequality and Welfare Spending: A Disaggregated Analysis,” *World Politics*, 2003, 55 (4), 485–516.
- Naghavi, Alireza and Giuseppe Pignataro**, “Theocracy and resilience against economic sanctions,” *Journal of Economic Behavior & Organization*, 2015, 111, 1–12.
- Narud, Hanne Marthe and Kaare Strøm**, “Norway. From Hønsvaldian Parliamentarism Back to Madisonian Roots,” in Torbjorn Bergman and Kaare Strøm, eds., *The Madisonian Turn: Political Parties and Parliamentary Democracy in Nordic Europe*, The University of Michigan Press, 2011.
- Oscarsson, Henrik and Soren Holmberg**, “Därför vann Alliansen. En sammanfattning av några resultat från valundersökningen 2006,” 2009. Democracy Statistics Report no 9, Statistics Sweden.
- Owens, Michael Leo**, *God and Government in the Ghetto: The Politics of Church-State Collaboration in Black America* Morality and Society Series, Chicago: University of Chicago Press, 2007.
- Pastor, Kate**, “3251 Broadway,” Working Paper, Urban Affairs 2007.
- Perlstein, Rick**, *Nixonland: The rise of a president and the fracturing of America*, Simon and Schuster, 2010.
- Poole, Howard Rosenthal Keith T.**, *Congress: A Political-Economic History of Roll Call Voting*, Oxford University Press, 1997.
- Poole, Keith T. and Howard Rosenthal**, “Patterns of Congressional Voting,” *American Journal of Political Science*, February 1991, 35 (1), 228–278.
- Rasmussen, Tarald**, “Stat og religion,” *Norsk Teologisk Tidsskrift*, 2007, 108 (1), 1–6.
- Roemer, John E.**, “Why the Poor Do Not Expropriate the Rich: An Old Argument in New Garb,” *Journal of Public Economics*, December 1998, 70 (3), 399 – 424.
- Romer, Thomas**, “Individual Welfare, Majority Voting, and the Properties of a Linear Income Tax,” *Journal of Public Economics*, February 1975, 4 (2), 163 – 185.
- Sadker, Myra, David Miller Sadker, and Karen R Zittleman**, *Teachers, schools, and society*, McGraw-Hill New York, 2008.
- Sandefur, Timothy**, “A Gleeful Obituary for Poletown Neighborhood Council v. Detroit,” *Harvard Journal of Law and Public Policy*, 2005, 28, 651–678.
- Schäfer, Axel R**, *American Evangelicals and the 1960s*, University of Wisconsin Pres, 2013.
- Scheve, Kenneth and David Stasavage**, “Religion and Preferences for Social Insurance,” *Quarterly Journal of Political Science*, 2006, 1 (1), 255–286.
- Scott, James C**, *The moral economy of the peasant: Rebellion and subsistence in Southeast Asia*, Yale University Press, 1977.
- Sen, Maya**, “Is Justice Blind? Natural Experiments, Judicial Quality, and Racial Bias in Federal Appellate Review,” Manuscript, Harvard University 2011.

- Smith, Thomas**, "Religious Affiliation and Philanthropy," Technical Report, University of Illinois mimeo 2004.
- Steensland, Brian, Jerry Z. Park, Mark D. Regnerus, Lynn D. Robinson, W. Bradford Wilcox, and Robert D. Woodberry**, "The Measure of American Religion: Toward Improving the State of the Art," *Social Forces*, September 2000, 79 (1), 291–318.
- Steinbuch, Robert**, "An Empirical Analysis of Reversal Rates in the Eighth Circuit During 2008," *Loyola of Los Angeles Law Review*, 2009, 43, 51–19.
- Sunstein, Cass R., David Schkade, Lisa M. Ellman, and Andres Sawicki**, *Are Judges Political?: An Empirical Analysis of the Federal Judiciary*, Brookings Institution Press, 2006.
- Thorkildsen, Dag**, "The Role of the Church in contemporary Norway: Changed Relations between State and Church," *Kirchliche Zeitgeschichte*, 2012, 25 (2), 272–92.
- van Bijsterveld, Sophie C.**, "Church and State in Western Europe and the United States: Principles and Perspectives," *Brigham Young University Law Review*, 2000, 2000 (3), 989–996.
- Woodberry, Robert D. and Christian S. Smith**, "Fundamentalism et al: Conservative Protestants in America," *Annual Review of Sociology*, 1998, 24 (1), 25–56.
- Wuthnow, Robert**, *God And Mammon In America*, Free Press, 1994.
- , "Mobilizing Civic Engagement: The Changing Impact of Religious Involvement," in Theda Skocpol and Morris Fiorina, eds., *Civic Engagement in American Democracy*, Brookings Institution Press, 2004, pp. 331–363.

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Web Appendix:

APPENDIX A: MODEL OF INSURANCE WITH SANCTIONS

Strong social sanctions facilitate provision of ex-post social insurance. In a crisis, religious organizations can help individuals after they experience negative income shocks. Social sanctions overcome the individual rationality constraints that would otherwise prevent ex post insurance groups from forming because they encourage people who receive positive shocks to participate. Group-based insurance/identity without strong social sanctions would be vulnerable to external pressure.

A.1. Religious Insurance

Agents receive a shock ($L < H$):

$$x = \begin{cases} H & \text{with probability } \frac{1}{2} \\ L & \text{with probability } \frac{1}{2} \end{cases}$$

There is a continuum of agents of unit measure. Members of religious organizations smooth their shocks through their religious community. An agent with religious attendance $\alpha \in [0, 1]$, chosen after the shock x is realized, shares a fraction α of his income with the religious group and keeps $1 - \alpha$ of his income separate from the risk-sharing pool. Agents divide the group budget in a manner proportionate to their relative religious intensity, which is $\alpha/\bar{\alpha}$ where $\bar{\alpha}$ denotes average religious intensity. Note that agents do not receive the same amount they put in: agents who receive negative shocks will get money from agents who receive positive shocks even if their religious intensity is the same.

Since agents who receive positive shocks would otherwise not participate, social sanctions $S(\cdot)$ ensures the stability of religious insurance.⁶⁴ These agents suffer social sanctions, which is captured by $rS(\alpha/\bar{\alpha})$, where r is a measure of an agent's vulnerability to social sanctions. The parameter r can also be thought of as capturing social conservatism—the more socially conservative, the more sanctioning of non-group members. The cost function $S(\cdot)$ is decreasing in $\alpha/\bar{\alpha}$ and convex, so $S' < 0$ and $S'' \geq 0$. Social sanctions facilitate the insurance provision by religious groups. If r were 0, no insurance can be sustained as H agents all choose 0 participation.

Utility $u(\cdot)$ is a standard increasing concave function of income. Let α_x denote the choice of religious intensity, where x can be H or L . Let $\bar{\mu}$ be the religious budget. The payoff to an agent who realizes x is:

$$U_x = u\left[(1 - \alpha_x)x + \frac{\alpha_x}{\bar{\alpha}}\bar{\mu}\right] - rS\left(\frac{\alpha_x}{\bar{\alpha}}\right) \tag{1}$$

From the setup it follows that the religious budget is $\bar{\mu} = \frac{1}{2}(H\alpha_H + L\alpha_L)$ and average religious intensity is $\bar{\alpha} = \frac{1}{2}(\alpha_H + \alpha_L)$. For shorthand, we will call an agent who receives a high shock by H and an agent who receives a low

⁶⁴More precisely, this is a model of ex-post insurance, introduced in the working paper version of Chen (2010), where agents choose participation after information is revealed. A model of ex-ante insurance would also give a trade-off between religious and government insurance. See, for example, Boodman (2005) regarding faith-based alternatives to health insurance where individuals contribute a monthly share and face sanctions for ignoring Christian doctrine or using secular courts to settle disputes.

shock by L . Agents take into account how the decision of others affects the budget $\bar{\mu}$ and optimize their religious intensity by equating marginal benefits to marginal costs in equation 1.

It can be immediately observed that agent L chooses a higher level of religious intensity than agent H , $\alpha_L^* > \alpha_H^*$. The intuition is simply that the higher is α_H the less agent H gets, whereas for agent L , the higher is α_L the more he gets.

It is important to observe that H 's religious intensity is, in a sense, complementary for L 's religious intensity: those who are more religiously intense prefer others to be religiously intense as well in order to appropriate their high income draw: this captures the local public goods aspect of club goods theory (Buchanan 1965). Therefore, for L , there are positive externalities from others' participation.

However, those who are less religiously intense prefer others to be less religiously intense to prevent appropriation of their high income draw. So for H , there are negative externalities from others' participation.

A.2. Government

We now introduce government transfers with tax rate τ and $T(\tau)\bar{Y}$ the amount of lump sum redistribution received from the government. The timing is such that agents, knowing their r , choose a preferred $\tau \in [0, 1]$, before realizing shock x and choosing to contribute a fraction α of their shock to the budget of their religious group $\bar{\mu}_r$ (the timeline: $r - \tau - x - \alpha$). Now the payoff to an agent who realizes x is:

$$U_x = u \left[(1 - \tau) \left((1 - \alpha_x) x + \frac{\alpha_x}{\bar{\alpha}} \bar{\mu}_r \right) + T(\tau) \bar{Y} \right] - r S \left(\frac{\alpha_x}{\bar{\alpha}} \right)$$

Each religious group (or denomination) has their own r degree of social conservatism and separate budget, and will be able to sustain a corresponding level of mutual insurance.

The optimal choice of α_x equates marginal benefits to marginal costs and satisfies:

$$\begin{aligned} & \leq 0 \quad \text{if } \alpha_x = 0 \\ (1 - \tau) u' \left[(1 - \tau) \left((1 - \alpha_x) x + \frac{\alpha_x}{\bar{\alpha}} \bar{\mu}_r \right) + T(\tau) \bar{Y} \right] \left(\frac{\bar{\mu}_r}{\bar{\alpha}} - x \right) - \frac{r}{\bar{\alpha}} S' \left(\frac{\alpha_x}{\bar{\alpha}} \right) & = 0 \quad \text{if } \alpha_x \in (0, 1) \text{ ,} \\ & \geq 0 \quad \text{if } \alpha_x = 1 \end{aligned}$$

and this provides religious intensity functions $\alpha_L(r)$ and $\alpha_H(r)$ as functions of vulnerability to social sanctions. As the sanction function S is convex, it can be seen that $\alpha'_x \geq 0$ with strict inequality for $\alpha_x < 1$. This formalizes the intuition that religious intensity increases with social sanctions. For L , optimal $\alpha_L^* = 1$. Since $\bar{\mu} = \frac{1}{2}(H\alpha_H + L\alpha_L)$ and average religious intensity is $\bar{\alpha} = \frac{1}{2}(\alpha_H + \alpha_L)$, $\frac{\bar{\mu}_r}{\bar{\alpha}} - L > 0$, so the marginal benefit is always positive.

Pre-tax income for L and H with religious intensity α_L and α_H can now be written as:

$$Y_L = (1 - \alpha_L(r))L + \frac{\alpha_L(r)}{\bar{\alpha}(r)} \bar{\mu}_r = L + \frac{\alpha_H(r)}{1 + \alpha_H(r)} (H - L) \quad (2)$$

$$Y_H = (1 - \alpha_H(r))H + \frac{\alpha_H(r)}{\bar{\alpha}(r)} \bar{\mu}_r = H - \frac{\alpha_H(r)}{1 + \alpha_H(r)} (H - L) \quad (3)$$

Since α_H is increasing in r , it can be seen that increasing social conservativeness works as a mean-preserving con-

traction of the spread between H and L as in the case without taxation. Agents have tax preferences satisfying the first-order condition:

$$\sum_{x \in \{L, H\}} \frac{1}{2} u' \left((1 - \tau^*) Y_x + T(\tau^*) \bar{Y} \right) [T'(\tau^*) \bar{Y} - Y_x] = 0.$$

Since $Y_H - Y_L$ decreases in r , it can be shown that the optimal tax rate τ^* is decreasing in r as well if $T''(\tau) < 0$.

PROPOSITION 1 *When utility is increasing and concave ($u'(x) > 0$ and $u''(x) < 0$) and taxation induces deadweight loss ($T'(\tau) < 1$ and $T''(\tau) < 0$), agents' preferred tax rate is decreasing in r .*

The proof follows from re-arranging the first-order condition above and deriving:

$$T'(\tau^*) = \frac{u' \left((1 - \tau^*) Y_L + T(\tau^*) \bar{Y} \right) Y_L + u' \left((1 - \tau^*) Y_H + T(\tau^*) \bar{Y} \right) Y_H}{\left[u' \left((1 - \tau^*) Y_L + T(\tau^*) \bar{Y} \right) + u' \left((1 - \tau^*) Y_H + T(\tau^*) \bar{Y} \right) \right] \bar{Y}}$$

The fraction increases and approaches 1 as $Y_H - Y_L$ decreases. This can be seen by observing that if the spread $Y_H - Y_L$ increases, the denominator increases faster than the numerator increases and so the overall fraction falls.

The intuition behind the result is that as r rises, the optimal α_H^* will rise as well as those who receive relative positive shocks feel more obliged to contribute due to rising social sanctions $rS(\cdot)$. For simplicity, optimal $\alpha_L^* = 1$ in this specification. More generally, with a cost of religious attendance such that optimal is less than 1, then the optimal α_L^* will rise with r as well because the budget of the religious group has expanded and because average religious intensity $\bar{\alpha}$ has risen, they must increase their religious intensity as well to keep the same share of the budget. With higher average religious intensity $\bar{\alpha}$, agents with high r can expect to have more smoothing provided by their religious group. Under standard assumptions ($T' < 1$, $T'' < 0$, i.e. deadweight losses from taxation), those who face less volatility will need and prefer less government insurance.

Thus, fiscal and social conservatives (high r and low τ) and fiscal and social liberals (low r and high τ) tend to come hand-in-hand and religious groups with greater within-group charitable giving are more against the welfare state (high α and low τ).

A.3. Separation Between Church and State

Accordingly, we introduce a state church by allowing a fraction γ of government budget $T(\tau)\bar{Y}$ to be apportioned directly for religious groups. The simple way to do this is to put $\gamma T(\tau)\bar{Y}$ directly inside the religious budget as follows:

$$U_x = u \left[(1 - \tau) \left((1 - \alpha_x) x + \frac{\alpha_x}{\bar{\alpha}} (\bar{\mu}_r + \gamma T(\tau)\bar{Y}) \right) + (1 - \gamma) T(\tau) \bar{Y} \right] - rS \left(\frac{\alpha_x}{\bar{\alpha}} \right)$$

and it can be seen that those with higher α , and who receive a higher share of the religious budget, will now be less inclined to be against the welfare state. More technically, we introduce ξ_r , the fraction of government funds for religious activity that goes to groups with social conservatism r . The payoff to agent x can be written as:

$$U_x = u \left[(1 - \tau) \left((1 - \alpha_x) x + \frac{\alpha_x}{\bar{\alpha}} \bar{\mu}_r \right) + \left(\gamma \xi_r \frac{\alpha_x}{\bar{\alpha}} + (1 - \gamma) \right) T(\tau) \bar{Y} \right] - r S \left(\frac{\alpha_x}{\bar{\alpha}} \right)$$

State funding provided to religious groups is exempt from taxation. This assumption is reasonable—state funding of religious buildings, insurance programs, or faith-based initiatives should not appear as taxable income. In reality, state funding of religious budgets is fungible with agents' own charitable contributions and could appear as taxable income. For considering religious agents' tax preferences, this effect is second-order, but for welfare considerations, this fungibility effect should be included. Even symbolic support of religious institutions may influence the population's vulnerability r to social sanctions. We focus on agents' tax preferences instead of welfare.

This formulation allows both the case where some religious groups are eligible for state funds but others are not (this more closely resembles the European case) as well as the case where any religious group is eligible to receive state funding (this more closely resembles the contemporary U.S. case). The U.S. was more like Europe even in the recent past—reading Protestant Bibles and disallowing Catholic Bibles in public schools was considered a form of double taxation on Catholics who also had to fund their own schools.

PROPOSITION 2 *There exists a fraction γ^* and function ξ_r such that the preferred tax rate of members of the state church is increasing with religious intensity iff $\gamma > \gamma^*$ and the preferred tax rate is below unity.*

Consider the extreme case of $\gamma = 1$. Then the income of agent x is:

$$Z_x = (1 - \tau) Y_x + \xi_r \frac{\alpha_x}{\bar{\alpha}} T(\tau) \bar{Y}$$

where Y_x is defined in (2) and (3). Then

$$\frac{\partial Z_x}{\partial \tau} = \xi_r \frac{\alpha_x}{\bar{\alpha}} T'(\tau) \bar{Y} - Y_x,$$

so tax preferences satisfy the following expression:

$$T'(\tau^*) = \frac{1}{\xi_r} \frac{u'(Z_L) Y_L + u'(Z_H) Y_H}{\left[\frac{\alpha_L}{\bar{\alpha}} u'(Z_L) + \frac{\alpha_H}{\bar{\alpha}} u'(Z_H) \right] \bar{Y}}$$

Similar to the case without a state church, the fraction on the right increases with r , which reduces the spread between H and L agents. However, if ξ_r increases with r sufficiently fast, the overall fraction will decline with r . Consequently, members of the state church have a preferred tax rate that is increasing with religiosity. For religious groups outside the state church or ineligible for state funding, ξ_r is constant (if government transfers are distributed randomly in

the population, groups receive government largess as a share of the population but this largess is divided over their population share), so their preferred tax rate is decreasing with religiosity.

A.4. *Dynamic Model*

In this section, we develop our model of the political economy of beliefs, which is simplified for tractability. Risk-sharing is still at the core of the model. Agents would like to insure themselves against income shocks. They make an insurance decision today in anticipation of income y in the next period that is distributed with mean μ and variance σ^2 , and they prefer higher expected value and lower variance in income:⁶⁵

$$\mu - \frac{1}{2}\sigma^2 \tag{4}$$

The model's time sequence is as follows: at time $t = 0$, both the level of religiosity and the level of church-state separation are set (both of these will be endogenized later). At time $t = 1$, the agents choose the level of taxes for income realizations at time $t = 2$.

A.5. *Taxes*

Consider agents' choice of taxes first. Agents vote for a level of taxation (τ) that provides a form of insurance. With taxation, income next period will be: $(1 - \tau)y + R(\tau)\mu$. This expression has the state collecting τ , a portion of income from each citizen, and then giving back the average of collected incomes, μ . In addition, the function $R(\tau)$ reflects deadweight losses associated with taxation (e.g., due to the state keeping a portion of the taxes).

When $R(\tau) = \tau$ there are no deadweight losses, so agents choose perfect insurance ($\tau = 1$) — people with high income will give more in taxes and get back less (μ), while agents with low income will give less in taxes and get back more. With distortions, the agents balance insurance considerations against the distortive effects of taxation. To see this, assume a standard concave function: $R(0) = 0, R' > 0, R'' < 0$, and $0 < R'(0) \leq 1$. The assumptions capture the fact that deadweight loss to taxes is 0 when taxes are 0 and increases with taxation.⁶⁶

The distribution of income with taxation will have mean $[(1 - \tau) + R(\tau)]\mu$ and variance $(1 - \tau)^2\sigma^2$. Thus, in choosing the tax rate, agents will maximize:

$$[(1 - \tau) + R(\tau)]\mu - \frac{1}{2}(1 - \tau)^2\sigma^2 \tag{5}$$

The FOC yields:

⁶⁵This could be seen as a reduced form of agents with CARA preferences and normally distributed shocks or agents with quadratic preferences, and is also in line with standard portfolio theory.

⁶⁶These assumptions guarantee that the deadweight loss is never so high that less is available for redistribution when there are higher taxes.

$$[-1 + R'(\tau)]\mu + (1 - \tau)\sigma^2 = 0, \quad (6)$$

or,

$$\frac{\mu}{\sigma^2} = \frac{1 - \tau}{1 - R'(\tau)}. \quad (7)$$

The right-hand side is a decreasing function of τ , so the agent balances the inherent randomness of income next period with the distortionary effects of taxation: the higher the income variation next period (bigger σ^2 relative to μ), the higher the agent's preferred tax rate.

The equation above can be rewritten as:

$$(1 - \tau)\sigma^2 = (1 - R'(\tau))\mu, \quad (8)$$

which provides the intuition for the basic setup. The left-hand side is the marginal benefit of increasing taxes: with higher taxes, the agent reduces the variance of income shocks. The right-hand side is the marginal cost of taxes: it is the deadweight loss that comes from taxation. At the optimum, the agent equates marginal benefit to marginal cost.

A.6. Religiosity

Now suppose the agent chooses taxation, having already observed their level of religiosity. Religiosity provides a source of insurance of in-kind or material benefits through the church. It works much like government taxation: agents give donations d as a portion of their income, which the church redistributes back as $P(d)\mu$, where the function $P(d)$ has similar first- and second-order derivative properties as the government's tax revenue function. The value d can be interpreted in two ways. d is the level of insurance that the agents insure through the church and it is also an indicator of their level of religiosity (the higher the level of religiosity, the more the agents are willing to donate to the church, and the church rewards the more devoted with higher payments).⁶⁷

With both religiosity and taxation, the agents' income next period will be: $(1 - \tau - d)y + R(\tau)\mu + P(d)\mu$, which means that the agents choosing the tax rate will maximize at time $t = 1$:

$$[(1 - \tau - d) + R(\tau) + P(d)]\mu - \frac{1}{2}(1 - \tau - d)^2\sigma^2. \quad (9)$$

The FOC with respect to τ , treating d as given, will be:

⁶⁷For now, d is not voluntary and is set by the church.

$$\frac{\mu}{\sigma^2} = \frac{1 - \tau - d}{1 - R'(\tau)}. \quad (10)$$

The first implication is that, if $R'(0)$ is 1 or very close to 1, the agent will surely use the state to insure, even if there is already church insurance. By the implicit function theorem:

$$-R''(\tau) \frac{\partial \tau}{\partial d} \frac{\mu}{\sigma^2} = -\frac{\partial \tau}{\partial d} - 1, \quad (11)$$

or,

$$\frac{\partial \tau}{\partial d} = \frac{1}{-1 + R''(\tau) \frac{\mu}{\sigma^2}}. \quad (12)$$

So,

$$\frac{\partial \tau}{\partial d} < 0. \quad (13)$$

The preceding comparative statics indicate that religiosity is negatively associated with preferred tax rate as the marginal benefit of additional taxation is $(1 - \tau - d)\sigma^2$, which is decreasing in d . With a higher level of d , the marginal benefit of insurance decreases for the agent, thus in equilibrium, the marginal cost of tax distortions will also decrease, which is done by lowering τ .

Note that the insurance participation is interpreted as the individual's level of religiosity. This is a simplifying assumption, but in one national survey of working Americans, 4% claimed to have received financial help from a religious organization within the past year, and among these recipients, 80% were themselves church or synagogue members (compared to 56% of non-recipients) and 61% belonged to religious fellowship groups (compared to 18% among non-recipients). The recipients were disproportionately those who had been laid off from work or experienced pay cuts and had trouble paying their bills (Wuthnow 1994).⁶⁸

A.7. State Religion

In the model, suppose the religion could be a state religion. The role of the state religion in redistributing to religious group members is parametrized by $\gamma \in [0, 1]$. In the model, $\gamma = 0$ is the case of no-state religion (complete separation of church-state) and examined in the previous sub-section. The degree of state religion increases with γ all the way up to 1. $\gamma = 1$ would correspond to the case where the church owns the state, and all the state revenues go to the church. The church gets γ share of the government revenue with the government retaining $1 - \gamma$.

⁶⁸Also, note here religiosity is exogenous. For example, one can imagine a cultural or genetic component to religiosity. The deadweight loss of redistribution can also be thought of as some cost to finding out who is deserving or who experienced an actual loss, rather than deadweight loss of collection, since weekly collection is usually straightforward.

The church's handling of resources is subject to a similar deadweight loss as tax redistribution, and transferred to members according to their level of religiosity. Then, the agents' income realization next period will be: $(1 - \tau - d)y + (1 - \gamma)R(\tau)\mu + P(d)(1 + \gamma R(\tau))\mu$. This would imply the agents' optimization will be:

$$[1 - \tau - d + (1 - \gamma)R(\tau) + P(d)(1 + \gamma R(\tau))]\mu - \frac{1}{2}(1 - \tau - d)^2\sigma^2, \quad (14)$$

or

$$[1 - \tau - d + R(\tau) + P(d) - (1 - P(d))\gamma R(\tau)]\mu - \frac{1}{2}(1 - \tau - d)^2\sigma^2. \quad (15)$$

First, for a given level of τ , and d , the agent gets less insurance income. However, the larger share of government revenue going to religion, γ , introduces increased payoff to having higher tax preferences, since the church will also have access to part of the state tax revenues.

The FOC of the new maximization problem will be:

$$[-1 + R'(\tau) - \gamma(1 - P(d))R'(\tau)]\mu + (1 - \tau - d)\sigma^2 = 0, \quad (16)$$

or,

$$\frac{\mu}{\sigma^2} = \frac{1 - \tau - d}{1 - R'(\tau) + \gamma(1 - P(d))R'(\tau)}. \quad (17)$$

The FOC then implies:

$$[R''(\tau)\frac{\partial\tau}{\partial\gamma} - (1 - P(d))R'(\tau) - \gamma(1 - P(d))R''(\tau)\frac{\partial\tau}{\partial\gamma}]\mu - \frac{\partial\tau}{\partial\gamma}\sigma^2 = 0, \quad (18)$$

or,

$$[R''(\tau)(1 - \gamma(1 - P(d))) - \sigma^2]\frac{\partial\tau}{\partial\gamma} = (1 - P(d))R'(\tau), \quad (19)$$

or,

$$\frac{\partial\tau}{\partial\gamma} = -\frac{(1 - P(d))R'(\tau)}{(-R''(\tau))(1 - \gamma(1 - P(d))) + \sigma^2} \quad (20)$$

Since both the numerator and the denominator of the expression are positive, we have that,

$$\frac{\partial \tau}{\partial \gamma} < 0 \tag{21}$$

But as d increases, the numerator decreases, while the denominator increases, which implies that:

$$\frac{\partial^2 \tau}{\partial \gamma \partial d} > 0. \tag{22}$$

If we assume the functions are continuous, then we also have that:

$$\frac{\partial^2 \tau}{\partial d \partial \gamma} = \frac{\partial^2 \tau}{\partial \gamma \partial d} > 0. \tag{23}$$

The negative relationship between religiosity and tax preferences is reduced when there is a state church because part of the benefits of government redistribution is received through the state church.

When γ is endogenously determined, the agents expect the state to set a certain level of church-state separation (γ^e), and in the rational expectations equilibrium, those expectations will hold true:

$$\gamma = \gamma^e. \tag{24}$$

A.8. Elite Preferences On Church-State Separation

We have shown religious intensity and tax preferences are inversely related when there is separation between church and state but religious intensity and tax preferences are positively related when there is no separation. The predictions of the model can be summarized in a simple diagram:

| | $\gamma = 0$ | | $\gamma = 1$ | |
|----------|-----------------|------------|---------------|------------|
| | High τ | Low τ | High τ | Low τ |
| High d | Religious Right | | Social Gospel | |
| Low d | Secular Left | | Libertarian | |

Without a state church ($\gamma = 0$), the highly religious prefer low taxes (religious right) and the less religious prefer high taxes (secular left). With a state church ($\gamma = 1$), the highly religious prefer high taxes (social gospel) while the less religious prefer low taxes (libertarian).

Suppose there are elites who desire a lower tax burden. Their preferences on church-state separation arguably depend on the relative weight of religious and non-religious constituencies. Elites plausibly desire a lower tax burden (Acemoglu and Robinson 2000) and have the power to choose (or judicate) church-state separation (Bickel 1986).

It is reasonable to view the elites as choosing γ given the literature on the counter-majoritarian difficulty whereby judicial review of legislative laws allows unelected judges to overrule the lawmaking of elected representatives and countermand the will of the majority. Religious individuals tax non-religious individuals through a state church. Elites judicate increasing church-state separation, which creates a larger voting constituency for lower taxes. This holds only if religious voters exceed non-religious voters. Otherwise, elites prefer a state church to curb the secular left's preference for a larger welfare state.⁶⁹

A.9. Multiple Steady States

Define d_t as the share of religious people in the society at time t ; γ_t is the amount of tax revenues that is given to the church (i.e., the higher is γ_t , the lower the degree of separation between church and state); w_t is the level of the welfare state in the economy. Each equation below relates the motion of one of the variables to another.

The first equation governing the process will be:

$$\gamma_t = \alpha - \beta d_t \tag{25}$$

This equation means that a high level of religiosity is associated with greater separation of church and state. It is the equation that sets up the elites' behavior, who curb the tax preferences of the religious left when there are many religious individuals by separating church and state, or do the opposite when the population is mostly secular.

The second equation of the process will be:

$$w_t = \alpha_\gamma - \beta_\gamma \gamma + \alpha_d - \beta_d d + \beta_{\gamma d} \gamma d. \tag{26}$$

The equation is derived from the equilibrium outcome of the interplay between government and church insurance in the diagram above. Elites curb tax preferences of the population by separating church and state when there are many religious individuals.⁷⁰ When there are few religious individuals, elites curb tax preferences by keeping a large

⁶⁹For simplicity, we can see this by limiting attention to a case with two groups, high d and low d in fractions f and $1 - f$. In a society where f is large, elites prefer low γ to curb the tax preferences of the religious voters. In a society where f is small, elites prefer high γ to curb the tax preferences of the secular voters.

FACT 3 *If f is high, elites prefer low γ ; if f is low, elites prefer high γ .*

Consider a simple model where taxes are determined by probabilistic voting between two parties (Lindbeck and Weibull 1987), where all voters have the same distribution for their individual party-specific taste shifters. Then both parties will commit to platforms maximizing a utilitarian social welfare function, $W(\tau) = fU_{hi_d}(\tau) + (1 - f)U_{lo_d}(\tau)$, which in this case involves putting the population weight f on the high r agents and weight $(1 - f)$ on the low r agents. If $f = 0$, voters prefer a low tax rate if $\gamma = 1$; if $f = 1$, voters prefer a low tax rate if $\gamma = 0$. The proposition then follows by continuity.

⁷⁰As γ goes to 0, the relationship between w_t and d is negative.

state church.⁷¹ Thus, the second partial with respect to γ and d is positive. Each of β , β_d , and β_γ are also positive. The second equation can be rewritten as:

$$w_t = (\alpha_\gamma - \beta_\gamma\alpha + \alpha_d) + (\beta_\gamma\beta - \beta_d + \alpha\beta_{\gamma d})d_t - \beta_{\gamma d}\beta d_t^2,$$

or,

$$w_t = b_1 + b_2d - b_3d^2.$$

Finally, many empirical studies document that government welfare crowds out religious participation and charitable provision (Gruber and Hungerman 2007; Hungerman 2005; Gill and Lundsgaarde 2004; Cnaan et al. 2002). We model this crowd-out by assuming that as the welfare state increases, the marginal person seeking insurance will turn to the welfare state instead of religion, so average religiosity declines:

$$n_t = \frac{1}{\phi w_t} = \frac{1}{a_1 + a_2d_t - a_3d_t^2}, \quad (27)$$

The evolution of d_t is as follows: at each subsequent period, the stock of religiosity decays by a constant fraction δ . However, it gets supplemented by the average new religiosity, as described in equation (24). Then, the dynamics of religiosity will follow as:

$$d_{t+1} = d_t(1 - \delta) + n_t. \quad (28)$$

Therefore, the steady state would satisfy:

$$d = d(1 - \delta) + \frac{1}{a_1 + a_2d - a_3d^2}. \quad (29)$$

Or,

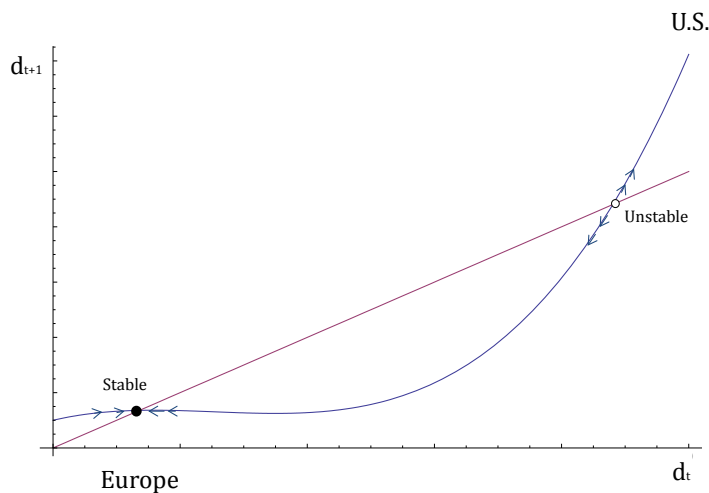
$$\delta a_3d^3 - \delta a_2d^2 - \delta a_1d + 1 = 0. \quad (30)$$

This equation has three roots. If all are real, $d(1 - \delta) + \frac{1}{a_1 + a_2d - a_3d^2}$ will intersect the 45° line at three places. Even though all three points represent steady states, we can characterize them as follows: Since a_3 is positive as is the constant term 1, at most two of the roots are positive. Second, $a_3 > 0$ implies that the two endpoints are unstable

⁷¹As d goes to 0, the relationship between w_t and γ is negative.

while the middle root is stable. In this case, the two stable equilibria are the middle root and $d = 1$, where Europe and the U.S., respectively, are located in Figure 2. In cases where the equation has one real and two complex roots, the unstable steady state is the only interior steady state. In this case, the two stable equilibria are $d = 0$ and $d = 1$.

Figure 11: Multiple Steady States



The model aligns with the intuition that when there are many religious individuals, the elites separate church and state, curbing tax preferences of the religious left, which reduces the welfare state. This, in turn, increases subsequent religiosity for the marginal person, creating a positive feedback. However, when there are few religious individuals, elites keep a large state church, attempting to curb the tax preferences of the secular left. This would tend to reduce the welfare state, which also increases subsequent religiosity, undermining the initial condition. This force creates a negative feedback, maintaining the large welfare state, and a stable steady state.

APPENDIX B: DATA APPENDIX

B.1. *General Social Survey*

The following variables are drawn from the U.S. General Social Survey's cross sectional cumulative data.⁷² Our data includes state identifiers, which we obtained with special permission.

Prayer in Public School refers to the question, "The United States Supreme Court has ruled that no state or local government may require the reading of the Lord's Prayer or Bible verses in public schools. What are your views on this—do you approve or disapprove of the court ruling?" Disapprove is coded as 1, approve as 0. Variable name: prayer.

Abortion should be Illegal refers to the question, "Please tell me whether or not you think it should be possible for a pregnant woman to obtain a legal abortion if she wants it for any reason" No is coded as 1, yes as 0. Variable

⁷²<http://www3.norc.org/GSS+Website>

name: abany.

Women Belong at Home refers to the question, "Is it much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family." Strongly agree and agree are coded as 1, disagree and strongly disagree are coded as 0. Variable name: fefam.

Premarital Sex is Wrong refers to the question, "There's been a lot of discussion about the way morals and attitudes about sex are changing in this country. If a man and woman have sex relations before marriage, do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?" Always wrong is coded as 1, the remainder as 0. 4. Variable name: premarsx.

Identify Republican refers to the question, "Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?" Strong Republican is coded as 1, not very strong Republican, Independent close to Republican, Independent, Independent close to Democrat, Not very strong Democrat, Strong Democrat are coded as 0. 5. Variable name: partyid.

Pro-Equality refers to the question, "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Here is a card with a scale from 1 to 7. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel?" 1 and 2 are coded as 1 and 3-7 coded as 0. Variable name: eqwlth.

Politically Conservative refers to the question, "We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal—point 1—to extremely conservative—point 7. Where would you place yourself on this scale? Extremely conservative and conservative are coded as 1, slightly conservative, moderate, slightly liberal, liberal, and extremely liberal are coded as 0. Variable name: polviews.

Identify as Fundamentalist refers to the question, "Do you consider yourself to be fundamentalist, moderate, or liberal?" Fundamentalist is coded as 1, Moderate and Liberal as 0. Variable name: fund.

Congregation Helps You refers to the question, "If you were ill, how much would the people in your congregation help you out?" A great deal is coded as 1, some, a little, or none are coded as 0. Variable name: conghlp1.

Supports more welfare refers to the question "Are we spending too much, too little, or about the right amount for welfare?". Too little is coded 1, too much and about right as 0. Variable name: natfare.

Social Conservatism Index is a 0-1 index equal to the mean of the values on Prayer in Public Schools, Abortion Should be Illegal, Women Belong at Home, Premarital Sex is Wrong and Identify as a Fundamentalist

Religion Attendance refers to the question "How often do you attend religious services?" Variable name: attend.

FiscalConservatism and *MoralConservatism* are attitudes that can be classified as measuring whether the respondent is fiscally conservative, i.e. favoring low taxes and low government expenditures, and morally conservative, i.e. favoring restrictions on abortion and related issues. The choice of variables is borrowed from (Ansolabehere et

al., 2006). They include the following variables:

Fiscal conservative:

Confidence: Business (i) / Financial institutions refer to the question “I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?” “Hardly any” is coded 1, “Only some” is coded 2 and “a great deal” is coded 3. Variable names: conbus confinan.

Confidence: Organized labor refers to the same question as above for organized labor, but with the scale reversed: “A great deal” is coded 1 and “Hardly any” is coded 3. Variable name: conlabor.

Confidence: Business (ii) refers to the question “How much confidence do you have in business and industry” “No confidence at all” is coded 1, “Some confidence” is coded 3 and “Complete confidence” is coded 5. Variable name: conbiz.

Equalize incomes (i) refers to the question “What is your opinion of the following statement? It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.” Coded from 1 (“Agree strongly”) to 5 (“Disagree strongly”). Variable name: eqincome.

Equalize income (ii) refers to the question “On the whole, do you think it should or should not be the government’s responsibility to reduce income differences between the rich and poor?” Coded from 1 (“Definitely should be”) to 4 (“Definitely should not be”). Variable name: equalize.

Equalize income (iii) refers to “Do you agree or disagree? It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.” Coded from 1 (“Strongly agree”) to 5 (“Strongly disagree”). Variable name: goveqinc.

Equalize wealth (i) and (ii) refer to the question “Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think that the government should not concern itself with reducing this income difference between the rich and the poor. Here is a card with a scale from 1 to 7. Think of a score of 1 as meaning that the government ought to reduce the income differences between rich and poor, and a score of 7 meaning that the government should not concern itself with reducing income differences. What score between 1 and 7 comes closest to the way you feel?” Variable names: eqwlth eqwlthy.

Government help general refers to the question “Some people think that the government in Washington is trying to do too many things that should be left to individuals and private businesses. Others disagree and think that the government should do even more to solve our country’s problems. Still others have opinions somewhere in between. Where would you place yourself on this scale, or haven’t you made up your mind on this?” Coded from 1 (“government do more”) to 5 (“government doing too much”). Variable name: helpnot.

Government help poor refers to the question “Some people think that the government in Washington should do everything possible to improve the standard of living of all poor Americans; they are at Point 1 on this card. Other people think it is not the government’s responsibility, and that each person should take care of himself; they are at Point 5. Where would you place yourself on this scale, or haven’t you have up your mind on this?” Coded from 1

("government do more") to 5 ("government doing too much"). Variable name: helpoor.

Government help sick refers to the question "In general, some people think that it is the responsibility of the government in Washington to see to it that people have help in paying for doctors and hospital bills. Others think that these matters are not the responsibility of the Federal Government and that people should take care of these things themselves. Where would you place yourself on this scale, or haven't you made up your mind on this?" Coded from 1 ("government do more") to 5 ("government doing too much"). Variable name: helpsick.

Help cities, Pro environment, Pro welfare and Pro health refer to the question "We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount." "Too Little" is coded 1, "About Right" is coded 2 and "Too Much" is coded 3. Variable names: nacity nacityy nacityz natenvir natenviy natenviz natfare natfarey natfarez natheal nathealy nathealz.

Cut taxes refers to the question "Do you consider the amount of Federal Income Tax which you have to pay as too high, about right, or too low?" "Too low" is coded 1, "About right" is coded 2 and "too high" is coded 3. Variable name: tax.

Moral conservative:

Abortion: ... (i) refer to the questions "Please tell me whether or not you think it should be possible for a pregnant woman to obtain a legal abortion if..." where circumstances are : "the women wants it for any reason", "there is a strong chance of serious defect in the baby", "the woman's own health is seriously endangered by the pregnancy?", "she is married and does not want any more children?", "the family has a very low income and cannot afford any more children?", "she became pregnant as a result of rape?" and "she is not married and does not want to marry the man?". Yes is coded 1, No is coded 2. Variable names: abany abdefect abhlth abnomore abpoor abrape absingle.

Abortion: any reason (ii) refer to the question "Do you agree or disagree. A pregnant woman should be able to obtain a legal abortion for any reason whatsoever, if she chooses not to have the baby." Coded from 1 ("Strongly agree") to 5 ("strongly disagree"). Variable name: abchoose.

Abortion: Defect (ii) and Family Poor (ii) refer to the question "Do you think the law should or should not allow a pregnant woman to obtain a legal abortion ..." "If there is a strong chance of serious defect in the baby" and "If the family has a very low income and cannot afford any more children". Coded from 1 ("Definitely should allow it") to 4 ("Definitely should not allow it"). Variable names: abdefct1 abpoor1.

Teacher: Atheist, Book in library: Atheist, Free speech: Atheist refer to the questions "There are always some people whose ideas are considered bad or dangerous by other people. For instance, somebody who is against all churches and religion / Should such a person be allowed to teach in a college or university, or not? / If some people in your community suggested that a book he wrote against churches and religion should be taken out of your public library, would you favor removing this book, or not? / If such a person wanted to make a speech in your (city/town/community) against churches and religion, should he be allowed to speak, or not?" Yes is coded 1, No is coded 2. Variable names: colath spkath libath.

Teacher: Homosexual, Book in library: Homosexual, Free speech: Homosexual refer to the questions “And what about a man who admits that he is a homosexual? Should such a person be allowed to teach in a college or university, or not? / If some people in your community suggested that a book he wrote in favor of homosexuality should be taken out of your public library, would you favor removing this book, or not? / Suppose this admitted homosexual wanted to make a speech in your community. Should he be allowed to speak, or not?” Yes is coded 1, No is coded 2. Variable names: colhomo libhomo spkhomo.

Confidence in organized religion (i) refers to the question “I am going to name some institutions in this country. As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them? C. Organized religion” “Hardly any” is coded 1, “only some” is coded 2 and “a great deal” is coded 3. Variable name: conclerg.

Confidence in organized religion (ii) refers to the question “I am going to name some institutions in this country. Some people have complete confidence in the people running these institutions. Suppose these people are at one end of the scale at point number 1. Other people have no confidence at all in the people running these institutions. Suppose these people are at the other end, at point 7. And, of course, other people have opinions somewhere in between at point 2, 3, 4, 5 or 6. Where would you place yourself on this scale for... C. Organized religion” “No confidence” is coded 1, “Complete confidence” is coded 7. Variable name: conclery.

Legalize marijuana (i) and (ii) refer to the question “Do you think the use of marijuana should be made legal or not?” “Make use legal” is coded 1, “don’t make use legal” is coded 2. Variable names: grass grassy.

Homosexual relations (i) and (ii) refer to the question “What about sexual relations between two adults of the same sex—do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?” “Not wrong at all” is coded 1, “always wrong” is coded 4. Variable name: homosex.

Pornography laws refer to the question “Which of these statements comes closest to your feelings about pornography laws? There should be laws against the distribution of pornography whatever the age. There should be laws against the distribution of pornography to persons under 18, There should be no laws forbidding the distribution of pornography” No laws is coded as 1, laws against distribution whatever the age is coded as 3. Variable name: pornlaw.

Religiosity refers to the question “Would you call yourself a strong (PREFERENCE NAMED IN RELIG) or a not very strong (PREFERENCE NAMED IN RELIG)?” “No religion” is coded as 1, “strong” is coded as 4. Variable name: reliten.

Extramarital relation refers to the question “What is your opinion about a married person having sexual relations with someone other than the marriage partner—is it always wrong, almost always wrong, wrong only sometimes, or not wrong at all?” “Not wrong at all” is coded 1, “always wrong” is coded 4. Variable name: xmarsex.

Religious denominations are classified following the RELTRAD scheme presented by Steensland et al. (2000).

B.2. *World Value Survey*

The following variables are taken from the World Values Survey.

Government responsibility: refers to the question “Now I’d like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left, 10 means

you agree completely with the statement on the right, or you can choose any number in between. 1: People should take more responsibility for providing for themselves, 10: The state should take more responsibility to ensure that everyone is provided for". Variable name: E037.

Income equality: refers to the above question for "1: Incomes should be made more equal, 10: There should be greater incentives for individual effort". Variable name: E035.

Attendance: refers to the question "Apart from weddings, funerals and christenings, about how often do you attend religious services these days?" "Only on special holy days/Christmas/Easter days" and "Other specific holy days" were merged together. The variable is coded from 0 (Never, practically never) to 7 (More than once a week). Variable name: F028.

Drespect refers to the question "Which of these two statements do you tend to agree with? A) Regardless of what the qualities and faults of ones parents are, one must always love and respect them, B) One does not have the duty to respect and love parents who have not earned it by their behavior and attitudes" Answer A is coded 1. Variable name: A025.

Dbest refers to the question "Which of the following statements best describes your views about parents' responsibilities to their children? 1) Parents duty is to do their best for their children even at the expense of their own well-being, 2) Parents have a life of their own and should not be asked to sacrifice their own well-being for the sake of their children, 3) Neither". Answer 1 is coded 1. Variable name: A026.

Dmanners, Dfaith, Dobey, Dindep, Dimagine, Dtolerate refer to the question "Here is a list of qualities which children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five." Variable names: A027, A040, A042, A029, A034 and A035.

Dfaith2 refers to the questions "Here is a shorter list of things that children can be encouraged to learn. If you had to choose, which one of these do you consider to be the most important thing for a child to learn at home?" It is coded 1 if either "Obedience" or "Religious faith" is answered. Variable name: A044.

Dfemhome refers to the question "Do you agree or disagree with the following statement? When jobs are scarce, men should have more right to a job than women." Agree is coded 1. Variable name: C001.

Dfemchild refers to the question "Do you think that a woman has to have children in order to be fulfilled or is this not necessary?" "Needs children" is coded 1. Variable name: D019.

Dmarriage refers to the question "Do you agree or disagree with the following statement? Marriage is an out-dated institution" Yes is coded 1. Variable name: D022.

Dsexfree refers to the question "If someone said that individuals should have the chance to enjoy complete sexual freedom without being restricted, would you tend to agree or disagree?" "Tend to agree" is coded 1. Variable name: D024.

Dwedlock refers to "If a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man, do you approve or disapprove?" Approve is coded 1. Variable name: D023.

Dabsolute refers to "Here are two statements which people sometimes make when discussing good and evil. Which one comes closest to your own point of view? A. There are absolutely clear guidelines about what is good and evil.

These always apply to everyone, whatever the circumstances. B. There can never be absolutely clear guidelines about what is good and evil. What is good and evil depends entirely upon the circumstances at the time” Answer A is coded 1. Variable name: F022.

Dhomobad, Dprolife, Ddivorcebad and Deuthanbad refers to “Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between”. “Never be justified” is coded 1. Variable names: F118, F120, F121, F122.

B.3. *Church-State Separation Data*

The first church-state separation dataset is drawn from Barro and McCleary (2005), which is based on Barrett (1982) and Barrett et al. (2001). They classify countries as having a state religion if the constitution designates an official state church and restricts or prohibits other forms of religion, or, if the government merely systematically favors a specified religion through subsidies and tax collection or through the teaching of religion in public school. Australia, Belgium, Canada, France, Mexico, and the United States are examples of countries with no state religion. Iceland, Denmark, Norway, United Kingdom, Italy, Iran, Iraq, Libya, Nepal, and Greece are examples of countries with state religion. The entire list is in Table 1a-1g of Barro and McCleary (2005). The dataset is merged with the World Value Survey by country.

The second church-state separation dataset comes from Finke and Grim (2006).⁷³ Specifically we use three standardized indices—Government Regulation of Religion (GRI), Government Favoritism of Religion (GFI), and Social Regulation of Religion (SRI)—as well as a variable on government financial support. These variables are described in the main text and merged with the World Value Survey by country.

Questions that comprise the Government Regulation Index are:

1. Are foreign or other missionaries allowed to operate?
2. Is proselytizing, public preaching, or conversion limited or restricted?
3. Does the government interfere with an individual’s right to worship?
4. How is freedom of religion described?
5. Does the government “generally respect” this right (to religious freedom) in practice?
6. Does government policy contribute to the generally free practice of religion?

Questions that comprise the Government Favoritism Index are:

1. What is the balance of government funding (including “in kind” such as funding buildings) to the religious sector?
2. To what extent is there a favored (or established) religious brand?

⁷³<http://www.thearda.com/Archive/Files/Descriptions/IRFAGG.asp>

3. How does the Government subsidize religion, including “in kind” to organizations run by religions, e.g., hospitals, schools, etc.?
4. Does the Government fund some things related to religion?
5. What religious things are funded by the government? Education/schools, buildings/upkeep/repair, clergy salary/benefits, print/broadcast media, charity/public service work, religious practice or mission work

Questions that comprise the Social Regulation Index are

1. Societal attitudes toward other or nontraditional religions are reported to be (positive) or negative?
2. Are citizens intolerant of “nontraditional” faiths?
3. Do traditional attitudes and/or edicts of the clerical establishment strongly discourage proselytizing?
4. Do established or existing religions try to shut out other religions in any way?
5. Citizens’ receptivity to proselytizing by nontraditional faiths or faiths other than their own are (positive) or negative?

The question on government financial support differs from prior questions in that it refers to financial support for a specific religion:

1. To what extent does the state provide a select religion or small group of religions with privileges, financial support, or favorable sanctions?

The third church-state separation dataset comes from the U.S. The data in Appendix Table XIX comes from About.com⁷⁴ ("Supreme Court Decisions-Religion in Schools"), which draws from Hall and Jr. (2009) and Alley (1988),(1999). The data includes Supreme Court decisions and Courts of Appeals decisions that were certiorari denied—decisions that were appealed but let stand by the Supreme Court without hearing.

The fourth church-state separation dataset comprise all church-state separation precedent from 1964-2011 in U.S. Courts of Appeals following the methodology established in Sunstein et al. (2006). We select all 1,147 Courts of Appeals cases mentioning the Establishment Clause and public school to match the Supreme Court analysis. We then restrict to three-judge cases that were substantively about church-state separation, resulting in 820 cases. We compiled information on judge characteristics from the Appeals Court Attribute Data, District Court Attribute Data,⁷⁵ Federal Judicial Center, and data collection efforts by one of the authors.

⁷⁴Downloaded in 2005.

⁷⁵<http://www.cas.sc.edu/poli/juri/attributes.html>

B.4. *Donation Data*

Philanthropic data comes from the 2001-2009 extract of the Panel Study of Income Dynamics.⁷⁶ The question on religious giving is, “Did you make any donations specifically for religious purposes or spiritual development, for example to a church, synagogue, mosque, TV or radio ministry? Please do not include donations to schools, hospitals, and other charities run by religious organizations.” Within-group giving is calculated for each religious group by constructing the average proportion of giving designated for religious purposes. The variable is then merged with the GSS data by religious denomination.

B.5. *Public Opinion in Norway and Sweden*

Data on public opinions in Norway and Sweden are drawn from electoral studies of the two countries. The Swedish election surveys collect data for 1991, 1994, 1998, 2002, and 2006. Oscarsson and Holmberg (2009) provide survey details and Bergman and Bolin (2011) gives an overview of Swedish politics. The Norwegian election surveys collect data for 1989, 1993, 1997, 2001 and 2005. Aardal et al. (2007) provide survey details and Narud and Strøm (2011) gives an overview of Norwegian politics. Each survey interviewed a representative sample of 2000-4000 respondents. In the Swedish survey, the question on Christian values was asked on a 10 point scale, which we reduce to a 5-point scale to match the Norwegian survey. Questions on cutting taxes and accepting income differentials are given on a 5-point scale in both countries and the wording is essentially the same.

APPENDIX C: TABLES AND FIGURES

The tables are organized as follows. First, we present summary statistics of all datasets. Second, we present extended analyses of fiscal and social conservatism/liberalism in the U.S. These analyses include various interactions, variable re-definitions, sub-samples, and detailed estimates underlying the analyses that use summary indices. Third, we present extended analyses of within-group giving, fiscal and social conservatism, and social insurance. Fourth, we present extended analyses of fiscal and social attitudes around the world. Fifth, we list the countries with and without church-state separation in our data. We then list the U.S. Supreme Court cases on church-state separation. Finally, we present a figure showing the correlation between religious attendance and the principal components of fiscal and social attitudes.

⁷⁶Available at <http://www.philanthropy.iupui.edu/philanthropy-panel-study>.

APPENDIX TABLE I
OUTCOME VARIABLES IN THE U.S. DATA

| Variable | GSS name | Range | Mean | Obs |
|-----------------------------|-----------|-------|------|-------|
| <i>Fiscal variables</i> | | | | |
| Confidence: Business (ii) | conbiz | 1-5 | 2.99 | 3814 |
| Confidence: Business (i) | conbus | 1-3 | 2.09 | 37175 |
| Confidence: Financial inst | confinan | 1-3 | 2.08 | 35053 |
| Confidence: Organized labor | conlabor | 1-3 | 2.20 | 36504 |
| Equalize incomes (i) | eqincome | 1-5 | 3.14 | 1867 |
| Equalize incomes (ii) | equalize | 1-4 | 2.58 | 6764 |
| Equalize wealth (i) | eqwlth | 1-7 | 3.72 | 28600 |
| Equalize wealth (ii) | eqwlthy | 1-7 | 3.67 | 749 |
| Equalize incomes (iii) | goveqinc | 1-5 | 3.21 | 10242 |
| Gov. help general | helpnot | 1-5 | 3.04 | 26920 |
| Gov. help poor | helppoor | 1-5 | 2.89 | 27570 |
| Gov. help sick | helpsick | 1-5 | 2.46 | 27646 |
| Help cities (i) | natcity | 1-3 | 1.65 | 29096 |
| Help cities (ii) | natcityy | 1-3 | 2.12 | 17090 |
| Help cities (iii) | natcityz | 1-3 | 1.63 | 427 |
| Pro environment (i) | natenvir | 1-3 | 1.48 | 31614 |
| Pro environment (ii) | natenviy | 1-3 | 1.43 | 19105 |
| Pro environment (iii) | natenviz | 1-3 | 1.49 | 465 |
| Pro welfare (i) | natfare | 1-3 | 2.28 | 31758 |
| Pro welfare (ii) | natfarey | 1-3 | 1.45 | 19447 |
| Pro welfare (iii) | natfarez | 1-3 | 1.38 | 473 |
| Pro health (i) | natheal | 1-3 | 1.40 | 32081 |
| Pro health (ii) | nathealy | 1-3 | 1.41 | 19441 |
| Pro health (iii) | nathealz | 1-3 | 1.46 | 465 |
| Cut taxes | tax | 1-3 | 2.62 | 30008 |
| <i>Moral variables</i> | | | | |
| Abortion: Any reason (i) | abany | 1-2 | 1.59 | 31807 |
| Abortion: Any reason (ii) | abchoose | 1-5 | 3.04 | 1332 |
| Abortion: Defect(ii) | abdefct1 | 1-4 | 1.65 | 1262 |
| Abortion: Defect (i) | abdefect | 1-2 | 1.20 | 39216 |
| Abortion: Mother's health | abhlth | 1-2 | 1.10 | 39384 |
| Abortion: Preference | abnomore | 1-2 | 1.56 | 39093 |
| Abortion: Family poor (i) | abpoor | 1-2 | 1.53 | 39028 |
| Abortion: Family poor (ii) | abpoor1 | 1-4 | 2.36 | 1219 |
| Abortion: Rape | abrape | 1-2 | 1.18 | 38981 |
| Abortion: Mother single | absingle | 1-2 | 1.56 | 39020 |
| Teacher: Atheist | colath | 1-2 | 1.48 | 34823 |
| Teacher: Homosexual | colhomo | 1-2 | 1.32 | 33283 |
| Conf. in org. religion (i) | conclerg | 1-3 | 2.08 | 37362 |
| Conf. in org. religion (ii) | conclery | 1-7 | 4.54 | 464 |
| Legalize marijuana (i) | grass | 1-2 | 1.73 | 32682 |
| Legalize marijuana (ii) | grassy | 1-2 | 1.67 | 743 |
| Homosexual relations (i) | homosex | 1-4 | 3.15 | 32707 |
| Homosexual relations (ii) | homosex1 | 1-4 | 3.14 | 4903 |
| Book in library: Atheist | libath | 1-2 | 1.32 | 35156 |
| Book in library: Homosexual | libhomo | 1-2 | 1.33 | 33487 |
| Pornography laws | pornlaw | 1-3 | 2.34 | 33953 |
| Religiosity | reliten | 1-4 | 3.05 | 52101 |
| Free speech: Atheist | spkath | 1-2 | 1.29 | 35732 |
| Free speech: Homosexual | spkhomo | 1-2 | 1.24 | 33516 |
| Extramarital relation (i) | xmarssex | 1-4 | 3.63 | 34019 |
| Extramarital relation (ii) | xmarssex1 | 1-4 | 3.69 | 5235 |

APPENDIX TABLE II
OTHER VARIABLES IN THE U.S. DATA

| | Mean | Std dev | Min | Max | Obs |
|----------------------------------|-------|---------|-------|-------|-------|
| Religious attendance | 3.83 | 2.71 | 0.00 | 8.00 | 56512 |
| Social conservatism | 0.36 | 0.38 | 0.00 | 1.00 | 56171 |
| Within-group giving | 0.61 | 0.16 | 0.40 | 0.91 | 43996 |
| Log income | 9.95 | 1.01 | 5.50 | 12.00 | 51231 |
| Age | 45.70 | 17.47 | 18.00 | 89.00 | 56859 |
| Highest year of school completed | 12.75 | 3.18 | 0.00 | 20.00 | 56897 |
| Gender | 1.56 | 0.50 | 1.00 | 2.00 | 57061 |
| Fundamentalist | 0.31 | 0.46 | 0.00 | 1.00 | 54907 |
| Religion: Evangelical protestant | 0.31 | 0.46 | 0.00 | 1.00 | 43996 |
| Religion: Mormon | 0.14 | 0.35 | 0.00 | 1.00 | 43996 |
| Religion: Catholic | 0.32 | 0.47 | 0.00 | 1.00 | 43996 |
| Religion: Jewish | 0.03 | 0.16 | 0.00 | 1.00 | 43996 |
| Religion: Other | 0.05 | 0.22 | 0.00 | 1.00 | 43996 |
| Religion: No religion | 0.14 | 0.35 | 0.00 | 1.00 | 43996 |
| Race: White | 0.81 | 0.39 | 0.00 | 1.00 | 57061 |
| Race: Black | 0.14 | 0.35 | 0.00 | 1.00 | 57061 |
| Race: Other | 0.05 | 0.22 | 0.00 | 1.00 | 57061 |
| Marital status: Married | 0.54 | 0.50 | 0.00 | 1.00 | 57041 |
| Marital status: Widowed | 0.10 | 0.30 | 0.00 | 1.00 | 57041 |
| Marital status: Divorced | 0.12 | 0.33 | 0.00 | 1.00 | 57041 |
| Marital status: Separated | 0.03 | 0.18 | 0.00 | 1.00 | 57041 |
| Marital status: Never married | 0.20 | 0.40 | 0.00 | 1.00 | 57041 |

APPENDIX TABLE III
VARIABLES IN THE WORLDWIDE DATA

| | Mean | Std dev | Min | Max | Obs |
|--|-------|---------|-------|-------|--------|
| Government responsibility | 6.22 | 3.02 | 1.00 | 10.00 | 234148 |
| Income equality | 5.93 | 3.02 | 1.00 | 10.00 | 230171 |
| Attendance | 3.62 | 2.58 | 0.00 | 7.00 | 238981 |
| Lives in country with SC | 0.39 | 0.49 | 0.00 | 1.00 | 257612 |
| Belongs to SC | 0.26 | 0.44 | 0.00 | 1.00 | 257612 |
| Income level | 4.51 | 2.39 | 1.00 | 10.00 | 226003 |
| Age | 40.31 | 15.91 | 14.00 | 99.00 | 247978 |
| Female | 0.52 | 0.50 | 0.00 | 1.00 | 252941 |
| Education: Less than elementary | 0.14 | 0.35 | 0.00 | 1.00 | 230283 |
| Education: Elementary | 0.15 | 0.35 | 0.00 | 1.00 | 230283 |
| Education: Incomplete secondary | 0.07 | 0.26 | 0.00 | 1.00 | 230283 |
| Education: Intermediate vocational secondary | 0.17 | 0.38 | 0.00 | 1.00 | 230283 |
| Education: Intermediate general secondary | 0.09 | 0.28 | 0.00 | 1.00 | 230283 |
| Education: Full secondary | 0.16 | 0.37 | 0.00 | 1.00 | 230283 |
| Education: Some university w/o degree | 0.07 | 0.26 | 0.00 | 1.00 | 230283 |
| Education: University with degree | 0.14 | 0.35 | 0.00 | 1.00 | 230283 |
| Marital status: Married | 0.58 | 0.49 | 0.00 | 1.00 | 253001 |
| Marital status: Cohabitation | 0.06 | 0.24 | 0.00 | 1.00 | 253001 |
| Marital status: Divorced | 0.03 | 0.17 | 0.00 | 1.00 | 253001 |
| Marital status: Separated | 0.02 | 0.13 | 0.00 | 1.00 | 253001 |
| Marital status: Widowed | 0.06 | 0.24 | 0.00 | 1.00 | 253001 |
| Marital status: Never married | 0.25 | 0.43 | 0.00 | 1.00 | 253001 |
| Marital status: Divorced, Separated or Widow | 0.00 | 0.02 | 0.00 | 1.00 | 253001 |
| Marital status: Living apart but steady relation | 0.00 | 0.01 | 0.00 | 1.00 | 253001 |

APPENDIX TABLE IV
THE FINKE/GRIM DATA

| Variable | Overall mean | With state church | Without state church | Difference |
|--|----------------|-------------------|----------------------|----------------|
| Government Regulation index (GRI) | 3.58 (2.91) | 4.75 (3.01) | 2.76 (2.55) | 1.99 [0.00] |
| Social Regulation Index (SRI) | 4.32 (2.90) | 5.33 (3.07) | 3.61 (2.56) | 1.72 [0.01] |
| Government Favoritism Index (GFI) | 5.61 (2.45) | 6.96 (1.87) | 4.66 (2.38) | 2.30 [0.00] |
| Government favoritism for specific group | 3.26 (1.83) | 4.46 (1.47) | 2.41 (1.56) | 2.05 [0.00] |

Notes: The table shows country averages of the variables from Finke and Grim (2006) used in the paper, broken down by Barro and McCleary's (2005) state church classification. Standard deviations in parentheses, and p-values from a t-test using Satterthwaite's degrees of freedom correction in square brackets.

APPENDIX TABLE V
VARIABLES IN THE SWEDISH AND NORWEGIAN SAMPLE

| | Mean | Std dev | Min | Max | Obs |
|--|------|---------|------|------|-------|
| Taxes on high incomes should be reduced | 2.62 | 1.42 | 1.00 | 5.00 | 20607 |
| It is not important to reduce income differences | 2.44 | 1.28 | 1.00 | 5.00 | 20456 |
| Preserving Christian values is important | 2.78 | 1.31 | 1.00 | 5.00 | 16207 |
| Period | 3.03 | 1.44 | 1.00 | 5.00 | 28095 |
| Sweden | 0.63 | 0.48 | 0.00 | 1.00 | 28095 |

APPENDIX TABLE VI
FISCAL AND SOCIAL CONSERVATISM/LIBERALISM IN THE U.S.—INTERACTIONS

| | Fiscal conservative (1) | Moral conservative (2) |
|-----------------------------|----------------------------|---------------------------|
| Religious attendance | 0.0114*** (0.00249) | 0.0871*** (0.00199) |
| Fundamentalist | 0.0133 (0.0131) | 0.217*** (0.0104) |
| Attendance × Fundamentalist | 0.00435 (0.00396) | -0.00384 (0.00322) |
| Observations | 52585 | 54197 |

Notes:

1. Data are from General Social Survey cumulative file, 1972-2012. All estimates are average effect size estimates. Standard errors in parentheses are adjusted for correlation within region of residence.

2. All specifications include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.

3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

APPENDIX TABLE VII
FISCAL AND SOCIAL CONSERVATISM/LIBERALISM IN THE U.S.—ALTERNATIVE VARIABLE DEFINITION

| | Fiscal conservative | | | Moral conservative | | |
|----------------------|------------------------|-----------------------|------------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Religious attendance | 0.0140*** (0.00195) | | 0.0118*** (0.00176) | 0.0904*** (0.00351) | | 0.0796*** (0.00263) |
| Social conservatism | | 0.0868*** (0.0111) | 0.0647*** (0.00995) | | 0.483*** (0.0307) | 0.357*** (0.0160) |
| Observations | 54541 | 54166 | 53728 | 56170 | 55821 | 55373 |

Notes:

1. Data are from General Social Survey cumulative file, 1972-2012. All estimates are average effect size estimates. Standard errors in parentheses are adjusted for correlation within region of residence.

2. All specifications include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.

3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

4. Social Conservatism is a 0-1 index summing up values on Prayer in Public School, Women Belong at Home, Premarital Sex is Wrong, and Identify as Fundamentalist.

APPENDIX TABLE VIII
FISCAL AND SOCIAL CONSERVATISM/LIBERALISM IN THE U.S.—BY RACIAL GROUP

A. White

| | Fiscal conservative | | | Moral conservative | | |
|----------------------|------------------------|-----------------------|------------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Religious attendance | 0.0189*** (0.00180) | | 0.0174*** (0.00189) | 0.0978*** (0.00306) | | 0.0919*** (0.00247) |
| Fundamentalist | | 0.0647*** (0.0163) | 0.0464*** (0.0138) | | 0.327*** (0.0263) | 0.238*** (0.0118) |
| Observations | 44330 | 43311 | 43003 | 45690 | 44661 | 44345 |

B. Black

| | Fiscal conservative | | | Moral conservative | | |
|----------------------|-------------------------|---------------------|-----------------------|------------------------|----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Religious attendance | -0.0000616 (0.00393) | | 0.000932 (0.00385) | 0.0597*** (0.00469) | | 0.0586*** (0.00512) |
| Fundamentalist | | -0.0184 (0.0127) | -0.0182 (0.0159) | | 0.118*** (0.0144) | 0.0809*** (0.0184) |
| Observations | 7482 | 7265 | 7200 | 7746 | 7527 | 7460 |

Notes:

1. Data are from General Social Survey cumulative file, 1972-2012. All estimates are average effect size estimates. Standard errors in parentheses are adjusted for correlation within region of residence.
2. All specifications include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.
3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

APPENDIX TABLE IX

FISCAL AND SOCIAL CONSERVATISM/LIBERALISM IN THE U.S.—DETAILED ESTIMATES

| | (1) | | (2) | | (3) | | Obs. | | |
|-----------------------------|-------------------|----------|-----------------------|----------|-------------------|-----------------------|-----------|----------|-------|
| | Relig. attendance | | Socially conservative | | Relig. attendance | Socially conservative | | | |
| <i>Fiscal conservative</i> | | | | | | | | | |
| Confidence: Business (ii) | 0.0264*** | (0.0041) | -0.0369 | (0.0350) | 0.0297*** | (0.0047) | -0.0908** | (0.0355) | 3691 |
| Confidence: Business (i) | 0.0120*** | (0.0011) | -0.0169 | (0.0122) | 0.0136*** | (0.0011) | -0.0403** | (0.0129) | 36086 |
| Confidence: Financial inst | 0.0146*** | (0.0014) | 0.0151 | (0.0083) | 0.0151*** | (0.0014) | -0.0084 | (0.0093) | 33974 |
| Confidence: Organized labor | -0.0002 | (0.0014) | 0.0437*** | (0.0076) | -0.0017 | (0.0013) | 0.0467*** | (0.0082) | 35452 |
| Equalize incomes (i) | 0.0291*** | (0.0062) | 0.0500 | (0.0860) | 0.0295*** | (0.0053) | 0.0077 | (0.0791) | 1821 |
| Equalize incomes (ii) | 0.0213*** | (0.0061) | 0.0666 | (0.0429) | 0.0206** | (0.0065) | 0.0329 | (0.0425) | 6519 |
| Equalize wealth (i) | 0.0274*** | (0.0029) | 0.1039 | (0.0620) | 0.0246*** | (0.0030) | 0.0667 | (0.0602) | 27619 |
| Equalize wealth (ii) | 0.0469 | (0.0340) | 0.3331* | (0.1784) | 0.0389 | (0.0371) | 0.2579 | (0.2111) | 737 |
| Equalize incomes (iii) | 0.0184*** | (0.0034) | 0.1051* | (0.0483) | 0.0156*** | (0.0028) | 0.0734 | (0.0485) | 9877 |
| Gov. help general | 0.0207*** | (0.0033) | 0.1103*** | (0.0322) | 0.0186*** | (0.0036) | 0.0758* | (0.0334) | 26026 |
| Gov. help poor | 0.0145*** | (0.0031) | 0.1277*** | (0.0352) | 0.0114** | (0.0037) | 0.1090** | (0.0375) | 26646 |
| Gov. help sick | 0.0296*** | (0.0031) | 0.2092*** | (0.0324) | 0.0246*** | (0.0037) | 0.1701*** | (0.0344) | 26728 |
| Help cities (i) | 0.0055** | (0.0021) | 0.0739** | (0.0246) | 0.0032* | (0.0015) | 0.0671** | (0.0213) | 28352 |
| Help cities (ii) | 0.0065** | (0.0023) | 0.1142*** | (0.0191) | 0.0030 | (0.0021) | 0.1065*** | (0.0180) | 16552 |
| Help cities (iii) | -0.0088 | (0.0056) | -0.0405 | (0.0878) | -0.0041 | (0.0089) | -0.0599 | (0.0937) | 412 |
| Pro environment (i) | 0.0147*** | (0.0015) | 0.1332*** | (0.0153) | 0.0110*** | (0.0013) | 0.1130*** | (0.0153) | 30799 |
| Pro environment (ii) | 0.0187*** | (0.0022) | 0.1472*** | (0.0269) | 0.0147*** | (0.0019) | 0.1203*** | (0.0253) | 18490 |
| Pro environment (iii) | 0.0015 | (0.0122) | 0.0980 | (0.0886) | -0.0015 | (0.0128) | 0.0897 | (0.0972) | 449 |
| Pro welfare (i) | 0.0140*** | (0.0015) | 0.0941*** | (0.0165) | 0.0117*** | (0.0017) | 0.0749*** | (0.0164) | 30944 |
| Pro welfare (ii) | 0.0065* | (0.0030) | 0.0598** | (0.0228) | 0.0049 | (0.0030) | 0.0496** | (0.0214) | 18815 |
| Pro welfare (iii) | -0.0028 | (0.0080) | 0.0701 | (0.0611) | -0.0052 | (0.0091) | 0.0782 | (0.0652) | 457 |
| Pro health (i) | 0.0112*** | (0.0018) | 0.0545*** | (0.0119) | 0.0099*** | (0.0017) | 0.0387*** | (0.0103) | 31259 |
| Pro health (ii) | 0.0111*** | (0.0023) | 0.0614** | (0.0211) | 0.0096*** | (0.0022) | 0.0450* | (0.0196) | 18813 |
| Pro health (iii) | 0.0123 | (0.0082) | 0.0102 | (0.0724) | 0.0075 | (0.0091) | 0.0082 | (0.0747) | 448 |
| Cut taxes | -0.0038*** | (0.0009) | 0.0421*** | (0.0072) | -0.0055*** | (0.0008) | 0.0495*** | (0.0070) | 29037 |
| <i>Moral conservative</i> | | | | | | | | | |
| Abortion: Any reason (i) | 0.0501*** | (0.0027) | 0.2363*** | (0.0190) | 0.0450*** | (0.0024) | 0.1617*** | (0.0094) | 30826 |
| Abortion: Any reason (ii) | 0.1987*** | (0.0127) | 1.0409*** | (0.0773) | 0.1759*** | (0.0123) | 0.7661*** | (0.0460) | 1282 |
| Abortion: Defect (ii) | 0.1263*** | (0.0106) | 0.6813*** | (0.1427) | 0.1106*** | (0.0086) | 0.5385*** | (0.1208) | 1227 |
| Abortion: Defect (i) | 0.0398*** | (0.0017) | 0.1701*** | (0.0125) | 0.0365*** | (0.0015) | 0.1110*** | (0.0082) | 38096 |
| Abortion: Mother's health | 0.0227*** | (0.0016) | 0.0866*** | (0.0101) | 0.0210*** | (0.0014) | 0.0532*** | (0.0079) | 38267 |
| Abortion: Preference | 0.0537*** | (0.0025) | 0.2463*** | (0.0190) | 0.0487*** | (0.0022) | 0.1668*** | (0.0101) | 37987 |
| Abortion: Family poor (i) | 0.0533*** | (0.0026) | 0.2463*** | (0.0192) | 0.0482*** | (0.0024) | 0.1685*** | (0.0103) | 37916 |
| Abortion: Family poor (ii) | 0.1309*** | (0.0143) | 0.8836*** | (0.1212) | 0.1077*** | (0.0113) | 0.7438*** | (0.1290) | 1184 |
| Abortion: Rape | 0.0377*** | (0.0019) | 0.1598*** | (0.0174) | 0.0345*** | (0.0018) | 0.1041*** | (0.0138) | 37867 |
| Abortion: Mother single | 0.0522*** | (0.0023) | 0.2404*** | (0.0169) | 0.0472*** | (0.0023) | 0.1645*** | (0.0093) | 37917 |
| Teacher: Atheist | 0.0194*** | (0.0012) | 0.1518*** | (0.0083) | 0.0154*** | (0.0010) | 0.1275*** | (0.0095) | 33726 |
| Teacher: Homosexual | 0.0215*** | (0.0019) | 0.1980*** | (0.0143) | 0.0160*** | (0.0013) | 0.1733*** | (0.0134) | 32213 |
| Conf. in org. religion (i) | 0.0689*** | (0.0035) | 0.1415*** | (0.0181) | 0.0683*** | (0.0034) | 0.0290** | (0.0105) | 36254 |
| Conf. in org. religion (ii) | 0.1011*** | (0.0282) | 0.2214 | (0.1487) | 0.1049*** | (0.0275) | 0.1206 | (0.1366) | 449 |
| Legalize marijuana (i) | 0.0340*** | (0.0014) | 0.1370*** | (0.0141) | 0.0310*** | (0.0010) | 0.0892*** | (0.0103) | 31620 |
| Legalize marijuana (ii) | 0.0400*** | (0.0076) | 0.3889*** | (0.0599) | 0.0293*** | (0.0065) | 0.3265*** | (0.0523) | 732 |
| Homosexual relations (i) | 0.1138*** | (0.0063) | 0.7147*** | (0.0537) | 0.0961*** | (0.0044) | 0.5659*** | (0.0381) | 31681 |
| Homosexual relations (ii) | 0.1123*** | (0.0118) | 0.8991*** | (0.0932) | 0.0882*** | (0.0110) | 0.7564*** | (0.0757) | 4726 |
| Book in library: Atheist | 0.0250*** | (0.0011) | 0.1868*** | (0.0100) | 0.0203*** | (0.0008) | 0.1549*** | (0.0104) | 34053 |
| Book in library: Homosexual | 0.0246*** | (0.0010) | 0.2009*** | (0.0132) | 0.0194*** | (0.0006) | 0.1702*** | (0.0127) | 32412 |
| Pornography laws | 0.0454*** | (0.0014) | 0.2267*** | (0.0182) | 0.0404*** | (0.0007) | 0.1648*** | (0.0144) | 32855 |
| Religiosity | 0.1769*** | (0.0059) | 0.6578*** | (0.0477) | 0.1669*** | (0.0054) | 0.3550*** | (0.0189) | 50894 |
| Free speech: Atheist | 0.0166*** | (0.0010) | 0.1298*** | (0.0144) | 0.0133*** | (0.0008) | 0.1087*** | (0.0148) | 34594 |
| Free speech: Homosexual | 0.0194*** | (0.0016) | 0.1700*** | (0.0130) | 0.0148*** | (0.0010) | 0.1480*** | (0.0119) | 32439 |
| Extramarital relation (i) | 0.0531*** | (0.0018) | 0.2418*** | (0.0188) | 0.0480*** | (0.0020) | 0.1669*** | (0.0162) | 32926 |
| Extramarital relation (ii) | 0.0457*** | (0.0015) | 0.2603*** | (0.0387) | 0.0403*** | (0.0020) | 0.1898*** | (0.0377) | 5050 |

Notes:

1. The table shows all the estimated coefficients on religious attendance and socially conservative for outcomes on fiscal and moral conservativeness. Specification (1) includes attendance and controls, specification (2) socially conservative and controls, and specification (3) attendance, socially conservative, and controls.

2. Estimated coefficients are from OLS regressions controlling for the same variables as Table I. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

3. Standard errors are clustered at the region of residence. Number of observations is the minimum number of observations, taken from specification (3).

4. Social Conservatism is a 0-1 index summing up values on Prayer in Public School, Women Belong at Home, Premarital Sex is Wrong, and Identify as Fundamentalist.

APPENDIX TABLE X
 WITHIN-GROUP GIVING AND FISCAL/SOCIAL CONSERVATISM IN THE U.S.

| | Fiscal conservative (1) | Moral conservative (2) |
|---------------------|----------------------------|---------------------------|
| Within-group giving | 0.421*** (0.0373) | 1.055*** (0.0828) |
| Observations | 42545 | 43727 |

Notes:

1. Data are from General Social Survey cumulative file, 1972-2012. All estimates are average effect sizes. Dependent variables are as in Table I. Standard errors in parentheses are adjusted for correlation within region of residence. *, ** and *** denote significance at the 10, 5 and 1% level.
2. All specifications include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.
3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

APPENDIX TABLE XI

WITHIN-GROUP GIVING AND FISCAL/SOCIAL CONSERVATISM IN THE U.S.—DETAILED ESTIMATES

| | Within-group giving | | Obs |
|-----------------------------|---------------------|----------|-------|
| <i>Fiscal conservative</i> | | | |
| Confidence: Business (ii) | 0.3524*** | (0.0708) | 3004 |
| Confidence: Business (i) | 0.1579** | (0.0482) | 28251 |
| Confidence: Financial inst | 0.2022*** | (0.0310) | 26771 |
| Confidence: Organized labor | 0.0961*** | (0.0222) | 27713 |
| Equalize incomes (i) | 0.4886** | (0.1767) | 1425 |
| Equalize incomes (ii) | 0.2955** | (0.1220) | 5307 |
| Equalize wealth (i) | 0.7074*** | (0.1486) | 22254 |
| Equalize wealth (ii) | 2.0101** | (0.6007) | 545 |
| Equalize incomes (iii) | 0.4586** | (0.1539) | 8124 |
| Gov. help general | 0.4843*** | (0.0689) | 20920 |
| Gov. help poor | 0.4622*** | (0.0814) | 21469 |
| Gov. help sick | 0.6974*** | (0.0561) | 21510 |
| Help cities (i) | 0.2315*** | (0.0354) | 22051 |
| Help cities (ii) | 0.4225*** | (0.0647) | 13462 |
| Help cities (iii) | 0.0646 | (0.1823) | 318 |
| Pro environment (i) | 0.3393*** | (0.0511) | 23876 |
| Pro environment (ii) | 0.3577*** | (0.0689) | 15027 |
| Pro environment (iii) | 0.7141** | (0.2356) | 344 |
| Pro welfare (i) | 0.3183*** | (0.0281) | 23969 |
| Pro welfare (ii) | 0.2061*** | (0.0602) | 15336 |
| Pro welfare (iii) | 0.5037* | (0.2210) | 352 |
| Pro health (i) | 0.2059*** | (0.0311) | 24284 |
| Pro health (ii) | 0.1743** | (0.0581) | 15311 |
| Pro health (iii) | 0.1969 | (0.3097) | 345 |
| Cut taxes | 0.0877** | (0.0345) | 23148 |
| <i>Moral conservative</i> | | | |
| Abortion: Any reason (i) | 0.5501*** | (0.0556) | 24546 |
| Abortion: Any reason (ii) | 1.7613*** | (0.2383) | 1046 |
| Abortion: Defect(ii) | 0.7076** | (0.2688) | 992 |
| Abortion: Defect (i) | 0.2446*** | (0.0439) | 29695 |
| Abortion: Mother's health | 0.0553** | (0.0228) | 29803 |
| Abortion: Preference | 0.5421*** | (0.0617) | 29710 |
| Abortion: Family poor (i) | 0.5304*** | (0.0612) | 29643 |
| Abortion: Family poor (ii) | 1.3374** | (0.4190) | 953 |
| Abortion: Rape | 0.2186*** | (0.0433) | 29489 |
| Abortion: Mother single | 0.5295*** | (0.0595) | 29661 |
| Teacher: Atheist | 0.4020*** | (0.0353) | 26584 |
| Teacher: Homosexual | 0.4603*** | (0.0350) | 25538 |
| Conf. in org. religion (i) | 0.6764*** | (0.0782) | 28402 |
| Conf. in org. religion (ii) | 0.2125 | (0.6244) | 346 |
| Legalize marijuana (i) | 0.4460*** | (0.0395) | 25058 |
| Legalize marijuana (ii) | 0.8091*** | (0.1238) | 542 |
| Homosexual relations (i) | 2.0739*** | (0.1339) | 25144 |
| Homosexual relations (ii) | 2.1003*** | (0.1370) | 3873 |
| Book in library: Atheist | 0.4353*** | (0.0510) | 26821 |
| Book in library: Homosexual | 0.4681*** | (0.0402) | 25651 |
| Pornography laws | 0.6030*** | (0.0340) | 26022 |
| Religiosity | 2.9723*** | (0.1512) | 40473 |
| Free speech: Atheist | 0.2958*** | (0.0438) | 27271 |
| Free speech: Homosexual | 0.3632*** | (0.0400) | 25690 |
| Extramarital relation (i) | 0.7588*** | (0.0720) | 26059 |
| Extramarital relation (ii) | 0.6757*** | (0.0730) | 4112 |

Notes:

1. The table shows all the estimated coefficients on the fraction of the respondent's charitable giving going to the religious group for outcomes on fiscal and moral conservativeness underlying Table I.
2. Estimated coefficients are from OLS regressions controlling for the same variables as Table I. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.
3. Standard errors are clustered at the region of residence.

APPENDIX TABLE XII
SOCIAL INSURANCE AND RELIGION

| | Congregation helps you a great deal if ill | | |
|----------------------------|--|----------------------|----------------------|
| | (1) | (2) | (3) |
| Religious attendance | 0.0838*** (0.00961) | | |
| Evangelical protestant (d) | | 0.378** (0.157) | 0.570*** (0.0419) |
| Mainline protestant (d) | | 0.280* (0.163) | 0.462*** (0.0594) |
| Catholic (d) | | 0.0998 (0.138) | 0.273*** (0.0383) |
| Other religion (d) | | 0.482*** (0.0778) | 0.718*** (0.0720) |
| Jewish (d) | | 0.0996 (0.165) | 0.333*** (0.0947) |
| No religion | | | 0.143 (0.0972) |
| Observations | 802 | 628 | 632 |

Notes:

1. Data are from General Social Survey cumulative file, 1998. Estimates (1) and (2) are marginal effects from probit models evaluated at sample means. Specification (3) is an OLS with no controls or intercept, so coefficients can be interpreted as group averages.
2. Specifications (1) and (2) include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.
3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.
4. Standard errors in parentheses are adjusted for correlation within region of residence.
5. Sample size is smaller than in other tables because this question is only asked in 1998. Column 2, the omitted category is no religion.

APPENDIX TABLE XIII
ALTERNATIVE OUTCOMES

| | Military | | | Schools | | |
|----------------------|------------------------|----------------------|-------------------------|-------------------------|------------------------|--------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Religious attendance | 0.0144*** (0.00251) | | 0.00783*** (0.00205) | -0.0111*** (0.00128) | | -0.00855*** (0.00165) |
| Social conservatism | | 0.238*** (0.0224) | 0.225*** (0.0239) | | -0.0827*** (0.0113) | -0.0657*** (0.0125) |
| R ² | 0.101 | 0.105 | 0.106 | 0.0756 | 0.0757 | 0.0762 |
| Observations | 31022 | 30838 | 30624 | 31828 | 31648 | 31421 |

Notes:

1. Data are from General Social Survey cumulative file, 1972-2012. All estimates are from OLS estimations. Standard errors in parentheses are adjusted for correlation within region of residence.
2. Outcomes are answers to questions of the type “We are faced with many problems in this country, none of which can be solved easily or inexpensively. I’m going to name some of these problems, and for each one I’d like you to tell me whether you think we’re spending too much money on it, too little money, or about the right amount.” The problems mentioned are “Are we spending too much, too little, or about the right amount on the military, armaments, and defense?” and “Are we spending too much, too little, or about the right amount on improving the nation’s education system?”, both on scales from 1-3. Outcomes are standardized.
3. All specifications include dummies for region of residence, marital status, year, race, and gender, and controls for the log of income, age, age-squared, and years of completed schooling.
4. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.
5. Social Conservatism is a 0-1 index summing up values on Prayer in Public School, Women Belong at Home, Premarital Sex is Wrong, and Identify as Fundamentalist.

Appendix Table XIV: Within-Group Giving and Fiscal/Social Conservatism in the U.S.

| | (1) | (2) | (3) | (4) | (5) | (6) | Obs |
|-----------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|-------|
| | Mormon | Evangelical protestant | Mainline protestant | Catholic | Other religion | Jewish | |
| <i>Fiscal conservative</i> | | | | | | | |
| Confidence: Business (ii) | 0.3796*** (0.1070) | 0.2618*** (0.0631) | 0.1169** (0.0624) | 0.3127*** (0.0725) | 0.0743 (0.0757) | 0.0337 (0.1582) | 3004 |
| Confidence: Business (i) | 0.1621*** (0.0214) | 0.1261*** (0.0233) | 0.1337*** (0.0158) | 0.0265** (0.0205) | 0.0265** (0.0099) | 0.0812** (0.0343) | 28251 |
| Confidence: Financial inst | 0.1353*** (0.0422) | 0.1279*** (0.0148) | 0.1075*** (0.0187) | 0.1075*** (0.0187) | 0.0188 (0.0233) | 0.0745** (0.0228) | 26771 |
| Confidence: Organized labor | -0.0034 (0.0403) | 0.0033 (0.0179) | -0.0109 (0.0275) | -0.0765*** (0.0169) | 0.0133 (0.0239) | -0.0045 (0.0241) | 27713 |
| Equalize incomes (i) | 0.1491 (0.2500) | 0.2175 (0.1827) | 0.0159 (0.1584) | 0.0790 (0.1715) | -0.0434 (0.2167) | -0.0468 (0.3291) | 1425 |
| Equalize incomes (ii) | 0.2457*** (0.0982) | 0.1394** (0.0528) | 0.0251 (0.0658) | 0.0898** (0.0458) | -0.0859 (0.0746) | 0.0781 (0.1063) | 5307 |
| Equalize wealth (i) | 0.8253*** (0.1167) | 0.3220*** (0.0527) | 0.0676 (0.0689) | 0.2004*** (0.0235) | 0.0370 (0.0814) | 0.2404** (0.1038) | 22254 |
| Equalize wealth (ii) | 0.8900*** (0.2669) | 0.5301 (0.3989) | 0.1866 (0.4894) | -0.11868 (0.3817) | 0.7920 (0.7920) | -0.8033 (0.8134) | 545 |
| Equalize incomes (iii) | 0.5851*** (0.0922) | 0.1893*** (0.0551) | 0.1125 (0.0630) | 0.0153 (0.0153) | 0.0433 (0.0433) | 0.0694 (0.0813) | 8124 |
| Gov. help general | 0.3347*** (0.0316) | 0.1459*** (0.0302) | 0.0560 (0.0483) | 0.0107 (0.0153) | 0.0696 (0.0696) | -0.2361** (0.0644) | 20920 |
| Gov. help poor | 0.3816*** (0.0831) | 0.1710*** (0.0379) | 0.0649 (0.0391) | 0.0595 (0.0363) | -0.0417 (0.0701) | -0.0805** (0.0318) | 21469 |
| Gov. help sick | 0.5262*** (0.0959) | 0.2568*** (0.0323) | 0.1256** (0.0543) | 0.1045** (0.0410) | -0.1072** (0.0402) | -0.2249*** (0.0588) | 21510 |
| Help cities (i) | 0.0286 (0.0292) | 0.0760*** (0.0198) | 0.0320 (0.0180) | 0.0130 (0.0206) | -0.0449* (0.0211) | -0.1983*** (0.0393) | 22051 |
| Help cities (ii) | 0.1946*** (0.0464) | 0.1397*** (0.0267) | 0.0531 (0.0319) | 0.0233 (0.0185) | -0.0209 (0.0300) | -0.2950*** (0.0219) | 13462 |
| Help cities (iii) | 0.2720 (0.2814) | -0.0420 (0.1243) | -0.0530 (0.2077) | -0.0035 (0.1295) | 0.1065 (0.1467) | 0.2510 (0.2510) | 318 |
| Pro environment (i) | 0.2623*** (0.0350) | 0.1437*** (0.0171) | 0.0818*** (0.0147) | 0.0688*** (0.0122) | -0.0140 (0.0214) | -0.0379 (0.0413) | 23876 |
| Pro environment (ii) | 0.2587*** (0.0633) | 0.1500*** (0.0365) | 0.0501* (0.0230) | 0.0732** (0.0265) | -0.0189 (0.0371) | -0.0482 (0.0397) | 15027 |
| Pro environment (iii) | 0.3349 (0.1971) | 0.2140 (0.1455) | -0.1235 (0.2054) | 0.0213 (0.1528) | -0.1588 (0.1766) | -0.3429 (0.2729) | 344 |
| Pro welfare (i) | 0.1606** (0.0549) | 0.1379*** (0.0162) | 0.0370 (0.0239) | 0.0756*** (0.0210) | -0.0253 (0.0193) | -0.1397** (0.0433) | 23969 |
| Pro welfare (ii) | 0.2134*** (0.0301) | 0.0553* (0.0271) | -0.0354 (0.0284) | 0.0134 (0.0142) | -0.0573 (0.0346) | -0.0005 (0.0322) | 15336 |
| Pro welfare (iii) | 0.0518 (0.0940) | 0.1859 (0.1012) | -0.0494 (0.118*) | -0.0085 (0.1279) | -0.0641 (0.0965) | -0.0358 (0.2162) | 352 |
| Pro health (i) | 0.1513*** (0.0239) | 0.0723*** (0.0140) | 0.0491* (0.0230) | 0.0154 (0.0136) | 0.0174 (0.0189) | -0.0790** (0.0265) | 24284 |
| Pro health (ii) | 0.1950*** (0.0355) | 0.0696** (0.0241) | 0.0389 (0.0246) | 0.0375 (0.0212) | 0.0723 (0.0413) | -0.0871*** (0.0241) | 15311 |
| Pro health (iii) | -0.0665 (0.1257) | 0.0169 (0.1449) | -0.1569 (0.1601) | -0.0444 (0.1355) | -0.1323 (0.2831) | -0.3898* (0.1694) | 345 |
| Cut taxes | 0.1053*** (0.0169) | 0.0577*** (0.0132) | 0.0292* (0.0157) | 0.0554*** (0.0073) | 0.0074 (0.0156) | 0.0588*** (0.0141) | 23148 |
| <i>Moral conservative</i> | | | | | | | |
| Abortion: Any reason (i) | 0.4362*** (0.0395) | 0.3178*** (0.0165) | 0.2042*** (0.0131) | 0.2699*** (0.0151) | 0.1410** (0.0138) | -0.0815** (0.0254) | 24546 |
| Abortion: Any reason (ii) | 1.1627*** (0.2713) | 0.9605*** (0.1363) | 0.2005 (0.2034) | 0.6398*** (0.1688) | 0.6971*** (0.1408) | -0.7163*** (0.1712) | 1046 |
| Abortion: Defect (i) | 1.0288*** (0.1738) | 0.4093** (0.1355) | 0.1708 (0.1678) | 0.3731*** (0.1078) | 0.6005** (0.2581) | -0.3630*** (0.0965) | 992 |
| Abortion: Defect (ii) | 0.2472*** (0.0206) | 0.1615*** (0.0078) | 0.0808*** (0.0097) | 0.1520*** (0.0132) | 0.1398*** (0.0151) | -0.0082 (0.0142) | 29695 |
| Abortion: Mother's health | 0.0301** (0.0077) | 0.0667*** (0.0067) | 0.0241*** (0.0060) | 0.0264*** (0.0096) | 0.0768** (0.0097) | -0.0057 (0.0064) | 29803 |
| Abortion: Preference | 0.4548*** (0.0445) | 0.3242*** (0.0156) | 0.2109*** (0.0178) | 0.2908*** (0.0145) | 0.1469*** (0.0098) | -0.1024*** (0.0217) | 29710 |
| Abortion: Family poor (i) | 0.4568*** (0.0381) | 0.3124*** (0.0164) | 0.1911*** (0.0143) | 0.2763*** (0.0135) | 0.1359*** (0.0092) | -0.0893*** (0.0238) | 29643 |
| Abortion: Family poor (ii) | 1.1862*** (0.3818) | 0.7118*** (0.1505) | 0.4958*** (0.1291) | 0.5530*** (0.1099) | 0.5838*** (0.1596) | -0.7700*** (0.1482) | 953 |
| Abortion: Rape | 0.1537*** (0.0151) | 0.1501*** (0.0126) | 0.0769*** (0.0154) | 0.1389*** (0.0146) | 0.1133*** (0.0087) | -0.0017 (0.0089) | 29489 |
| Abortion: Mother single | 0.4380*** (0.0412) | 0.3165*** (0.0165) | 0.2012*** (0.0131) | 0.2864*** (0.0125) | 0.1426*** (0.0063) | -0.1169*** (0.0285) | 29661 |
| Teacher: Atheist | 0.1402*** (0.0225) | 0.2396*** (0.0112) | 0.1747*** (0.0102) | 0.1557*** (0.0121) | 0.1051** (0.0158) | 0.0913*** (0.0223) | 26584 |
| Teacher: Homosexual | 0.1222*** (0.0163) | 0.1934*** (0.0116) | 0.0915*** (0.0149) | 0.0380*** (0.0062) | 0.0868*** (0.0091) | -0.0725*** (0.0131) | 25538 |
| Conf. in org. religion (i) | 0.6798*** (0.0738) | 0.5198*** (0.0153) | 0.5482*** (0.0203) | 0.5557*** (0.0140) | 0.1809*** (0.0185) | 0.2912*** (0.0221) | 28402 |
| Conf. in org. religion (ii) | 1.2998 (0.7948) | 0.3277 (0.3377) | 1.9508*** (0.3752) | 1.9508*** (0.2878) | 0.5748 (0.9217) | 1.3902* (0.6136) | 346 |
| Legalize marijuana (i) | 0.3221*** (0.0210) | 0.2635*** (0.0160) | 0.2036*** (0.0190) | 0.2104*** (0.0151) | 0.1306*** (0.0217) | 0.0086 (0.0113) | 25058 |
| Legalize marijuana (ii) | 0.6965*** (0.0955) | 0.3986*** (0.0651) | 0.3557*** (0.0706) | 0.2547*** (0.0604) | 0.2195** (0.0768) | -0.1226 (0.1191) | 542 |
| Homosexual relations (i) | 1.2708*** (0.0808) | 1.0583*** (0.0405) | 0.6896*** (0.0335) | 0.6545*** (0.0291) | 0.4096** (0.0412) | -0.2016** (0.0550) | 25144 |
| Homosexual relations (ii) | 1.1738*** (0.1738) | 1.0146*** (0.0725) | 0.6288*** (0.1100) | 0.5379*** (0.0614) | 0.4523*** (0.1045) | -0.3890* (0.2020) | 3873 |
| Book in library: Atheist | 0.0919*** (0.0238) | 0.2207*** (0.0132) | 0.1978*** (0.0160) | 0.1043*** (0.0124) | 0.0566*** (0.0094) | -0.0001 (0.1113) | 26821 |
| Book in library: Homosexual | 0.1243*** (0.0225) | 0.2088*** (0.0106) | 0.0773*** (0.0170) | 0.0585*** (0.0081) | 0.0773*** (0.0114) | -0.0290 (0.0211) | 25651 |
| Pornography laws | 0.3932*** (0.0344) | 0.2915*** (0.0156) | 0.1441*** (0.0173) | 0.1573*** (0.0129) | 0.1697*** (0.0239) | -0.0773** (0.0297) | 26022 |
| Religiosity | 2.5331*** (0.0588) | 2.3437*** (0.0091) | 2.2966*** (0.0138) | 2.2136*** (0.0120) | 2.3820*** (0.0256) | 2.1999*** (0.0330) | 40473 |
| Free speech: Atheist | 0.0533** (0.0183) | 0.1678*** (0.0126) | 0.1148*** (0.0171) | 0.0948*** (0.0087) | 0.0554*** (0.0087) | 0.0522*** (0.0125) | 27271 |
| Free speech: Homosexual | 0.0958*** (0.0208) | 0.1562*** (0.0132) | 0.0660*** (0.0080) | 0.0301*** (0.0057) | 0.0827*** (0.0057) | -0.0276* (0.0141) | 25690 |
| Extramarital relation (i) | 0.5248*** (0.0327) | 0.4368*** (0.0306) | 0.3314*** (0.0176) | 0.3233*** (0.0209) | 0.2276*** (0.0276) | 0.0396 (0.0401) | 26059 |
| Extramarital relation (ii) | 0.4831*** (0.0468) | 0.4022*** (0.0341) | 0.2803*** (0.0757) | 0.3034*** (0.0371) | 0.1927*** (0.0605) | 0.1466 (0.1151) | 4112 |

Notes:

1. The table shows all the estimated coefficients on dummies for the respondent's religious denomination.
2. Estimated coefficients are from OLS regressions controlling for the same variables as Table X. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.
3. Standard errors are clustered at the region of residence.

APPENDIX TABLE XV
WITHIN-GROUP GIVING BY DENOMINATION IN THE U.S.

| | \$ to Relgs | \$ to All | %Charity to Relg | Income | %Inc to R | N |
|-------------------------|-------------|-----------|------------------|--------|-----------|------|
| Mormons | 4066 | 4467 | 0.91 | 77730 | 0.052 | 26 |
| Evangelical Protestants | 908 | 1139 | 0.82 | 49755 | 0.018 | 1271 |
| Mainline Protestants | 740 | 1193 | 0.62 | 72310 | 0.010 | 997 |
| Catholics | 491 | 962 | 0.51 | 71010 | 0.007 | 1451 |
| Other | 750 | 1504 | 0.50 | 49780 | 0.015 | 938 |
| Jewish | 1127 | 2791 | 0.40 | 125160 | 0.009 | 142 |
| None | 221 | 553 | 0.40 | 54360 | 0.004 | 663 |

Notes:

1. Data are from the 2001 Center on Philanthropy Panel Study portion of the Current Population Surveys. Summary statistics by denomination are reported in Smith (2004).

APPENDIX TABLE XVI

DETAILED ESTIMATION RESULTS ON WELFARE ATTITUDES AROUND THE WORLD

| Country | Total | Wave 2 | Wave 3 | Wave 4 | Wave 5 |
|----------------------|-----------------|----------------|-----------------|-----------------|-----------------|
| Albania | .077*** (.027) | | .085** (.04) | .035 (.038) | |
| Algeria | -.028 (.029) | | | -.028 (.029) | |
| Andorra | .02 (.037) | | | | .02 (.037) |
| Azerbaijan | .1*** (.034) | | .1*** (.034) | | |
| Argentina | -.091*** (.02) | | -.095*** (.036) | -.044 (.035) | |
| Australia | -.014 (.018) | | -.0064 (.023) | | -.022 (.03) |
| Bangladesh | .015 (.029) | | -.026 (.059) | -.063* (.037) | |
| Armenia | -.024 (.029) | | -.024 (.029) | | |
| Brazil | .021 (.022) | .041 (.034) | -.036 (.055) | | -.04 (.031) |
| Bulgaria | -.00074 (.029) | | -.081** (.041) | | .067 (.042) |
| Belarus | .2*** (.025) | | .15*** (.029) | | |
| Canada | -.039** (.016) | | | -.028 (.023) | -.045** (.021) |
| Chile | -.053*** (.017) | | -.095*** (.035) | -.014 (.03) | -.043 (.034) |
| China | .074* (.04) | | | -.012 (.079) | .0053 (.062) |
| Taiwan | .03 (.027) | | .0052 (.041) | | .049 (.036) |
| Colombia | -.032* (.018) | | -.0042 (.025) | | -.056** (.026) |
| Cyprus | -.069* (.039) | | | | -.069* (.039) |
| Czech Republic | .058* (.03) | | .022 (.036) | | |
| Dominican Republic | .14** (.068) | | .14** (.068) | | |
| El Salvador | .012 (.043) | | .012 (.043) | | |
| Ethiopia | .041 (.034) | | | | .041 (.034) |
| Estonia | .081* (.044) | | .081* (.044) | | |
| Finland | .026 (.029) | | .068 (.047) | | -.0017 (.036) |
| France | -.12*** (.04) | | | | -.12*** (.04) |
| Georgia | .0026 (.022) | | -.012 (.032) | | -.00087 (.032) |
| Ghana | .037 (.047) | | | | .037 (.047) |
| Guatemala | -.014 (.054) | | | | -.014 (.054) |
| Hong Kong | -.0059 (.024) | | | | -.0059 (.024) |
| India | -.078*** (.02) | .019 (.027) | -.091** (.043) | -.16*** (.044) | .088** (.042) |
| Indonesia | -.087*** (.031) | | | -.058 (.057) | -.099*** (.036) |
| Iran | .00048 (.019) | | | .05 (.037) | .027 (.022) |
| Iraq | .026** (.013) | | | .043** (.019) | .0081 (.016) |
| Italy | .02 (.038) | | | | .02 (.038) |
| Japan | -.066*** (.023) | | | -.13*** (.043) | -.092** (.045) |
| Jordan | .088*** (.02) | | | .049* (.026) | |
| South Korea | -.092*** (.017) | -.025 (.049) | .064** (.028) | .061** (.025) | .022 (.026) |
| Kyrgyzstan | .016 (.04) | | | .016 (.04) | |
| Latvia | .066* (.037) | | .066* (.037) | | |
| Lithuania | .069 (.042) | | .069 (.042) | | |
| Mali | .0084 (.039) | | | | .0084 (.039) |
| Mexico | .0076 (.017) | | .036 (.026) | -.014 (.048) | .014 (.039) |
| Moldova | .12*** (.026) | | .19*** (.044) | .016 (.047) | .17*** (.045) |
| Morocco | .062*** (.022) | | | .062*** (.022) | |
| Netherlands | -.091*** (.033) | | | | -.091*** (.033) |
| New Zealand | -.051** (.025) | | -.061* (.033) | | -.046 (.037) |
| Nigeria | .034 (.028) | -.072 (.055) | .11*** (.043) | -.07 (.051) | |
| Norway | -.027 (.025) | | .034 (.034) | | -.09** (.036) |
| Pakistan | .18*** (.042) | | | .18*** (.042) | |
| Peru | .0011 (.024) | | .0058 (.045) | -.011 (.043) | .0054 (.039) |
| Philippines | -.019 (.038) | | | -.028 (.046) | |
| Poland | .065* (.036) | | .11** (.049) | | .0074 (.052) |
| Puerto Rico | -.0088 (.031) | | -.00096 (.04) | .00076 (.05) | |
| Romania | .018 (.028) | | .082* (.043) | | -.025 (.037) |
| Russian Federation | .12*** (.021) | | .033 (.033) | | .0084 (.033) |
| Rwanda | -.099 (.06) | | | | -.099 (.06) |
| Saudi Arabia | .053* (.028) | | | .053* (.028) | |
| Singapore | .17*** (.03) | | | .17*** (.03) | |
| Slovakia | .066** (.027) | | .059** (.03) | | |
| Viet Nam | .061** (.027) | | | -.09* (.046) | .13*** (.034) |
| Slovenia | .051** (.026) | | | | .033 (.037) |
| South Africa | -.028* (.014) | | -.049* (.027) | .0086 (.025) | -.047** (.024) |
| Zimbabwe | -.0019 (.046) | | | -.0019 (.046) | |
| Spain | -.022 (.015) | | .016 (.03) | -.000014 (.027) | -.011 (.028) |
| Sweden | -.014 (.025) | | -.0043 (.035) | -.018 (.039) | -.016 (.04) |
| Switzerland | -.037 (.024) | | .0041 (.034) | | -.048 (.032) |
| Thailand | .12*** (.037) | | | | .12*** (.037) |
| Trinidad and Tobago | .06 (.048) | | | | .06 (.048) |
| Turkey | -.025* (.014) | -.12*** (.038) | .18*** (.032) | -.075*** (.019) | -.031 (.029) |
| Uganda | -.092 (.068) | | | -.092 (.068) | |
| Ukraine | .027 (.021) | | .071*** (.024) | | -.048 (.041) |
| Macedonia | .054* (.032) | | .1** (.046) | -.019 (.045) | |
| Egypt | -.02* (.012) | | | .0052 (.019) | -.039*** (.014) |
| Great Britain | .028 (.034) | | | | .028 (.034) |
| Tanzania | -.025 (.055) | | | -.025 (.055) | |
| United States | -.095*** (.017) | | -.063** (.028) | -.052 (.032) | -.11*** (.028) |
| Burkina Faso | .06* (.036) | | | | .06* (.036) |
| Uruguay | -.069** (.03) | | -.019 (.038) | | -.058 (.05) |
| Venezuela | -.02 (.031) | | .015 (.045) | -.055 (.042) | |
| Zambia | -.17*** (.04) | | | | -.17*** (.04) |
| Germany West | -.0045 (.025) | | -.023 (.034) | | -.03 (.036) |
| Germany East | -.057* (.03) | | -.071 (.043) | | -.041 (.042) |
| Serbia | .015 (.024) | | .077** (.038) | .14*** (.042) | -.035 (.042) |
| Montenegro | .18*** (.039) | | -.16* (.089) | .26*** (.044) | |
| SrpSka - Serbian Rep | .095* (.054) | | .014 (.059) | .24*** (.087) | |
| Bosnia Federation | -.056** (.028) | | -.031 (.039) | -.082** (.04) | |

Notes:

1. Data are from World Values Survey cumulative file, waves 2-5. Standard errors in parentheses are adjusted for correlation within country of residence.

2. All specifications include dummies for country of residence, survey wave, gender, and category of educational attainment and controls for the income, age, and age².

3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

APPENDIX TABLE XVII
SOCIAL CONSERVATISM AROUND THE WORLD

| | Attendance | | N |
|---|------------|---------|--------|
| Respect and love for parents | 0.012*** | (0.001) | 152872 |
| Parents responsibilities to their children | 0.008*** | (0.001) | 152336 |
| Important child qualities: good manners | 0.001 | (0.001) | 123876 |
| Important child qualities: religious faith | 0.043*** | (0.003) | 232732 |
| Important child qualities: obedience | 0.006*** | (0.001) | 234867 |
| Important child qualities: independence | -0.010*** | (0.001) | 234867 |
| Important child qualities: imagination | -0.007*** | (0.001) | 232569 |
| Important child qualities: tolerance and respect for other people | -0.002*** | (0.001) | 234867 |
| What children should learn 1 | 0.028*** | (0.002) | 69072 |
| Jobs scarce: Men should have more right to a job than women | 0.007*** | (0.001) | 219238 |
| A woman has to have children to be fulfilled | 0.008*** | (0.001) | 156126 |
| Marriage is an out-dated institution | 0.000 | (0.000) | 205297 |
| Enjoy sexual freedom | -0.013*** | (0.002) | 87478 |
| Woman as a single parent | -0.016*** | (0.002) | 216423 |
| Statement: good and evil | 0.021*** | (0.002) | 128720 |
| Justifiable: homosexuality | 0.014*** | (0.001) | 205856 |
| Justifiable: abortion | 0.024*** | (0.002) | 216178 |
| Justifiable: divorce | 0.015*** | (0.001) | 218534 |
| Justifiable: euthanasia | 0.021*** | (0.002) | 201121 |

Notes:

1. Data are from World Values Survey cumulative file, waves 2-5. Standard errors in parentheses are adjusted for correlation within country of residence.
2. All specifications include dummies for country of residence, survey wave, gender, and category of educational attainment and controls for income, age, and age².
3. Missing values in control variables are replaced by the value 0 and a dummy for the variable being missing is included.

APPENDIX TABLE XVIII
COUNTRIES WITH AND WITHOUT A STATE CHURCH

| Without state church | With state church |
|-------------------------------------|----------------------------------|
| Albania | <i>Armenian Apostolic Church</i> |
| Australia | Armenia |
| Brazil | <i>Buddhist</i> |
| Canada | Thailand |
| Chile | <i>Jew</i> |
| China | Israel |
| Taiwan | <i>Muslim</i> |
| Cyprus | Algeria |
| Czech Republic | Azerbaijan |
| Ethiopia | Bangladesh |
| Estonia | Iran |
| France | Iraq |
| Ghana | Jordan |
| Hong Kong | Kyrgyzstan |
| Hungary | Malaysia |
| India | Morocco |
| Indonesia | Pakistan |
| Japan | Saudi Arabia |
| South Korea | Egypt |
| Latvia | <i>Orthodox</i> |
| Lithuania | Bulgaria |
| Mali | Belarus |
| Mexico | Georgia |
| Netherlands | Moldova |
| New Zealand | Ukraine |
| Nigeria | Macedonia |
| Philippines | <i>Protestant</i> |
| Poland | Finland |
| Puerto Rico | Norway |
| Romania | Great Britain |
| Russian Federation | <i>Roman Catholic</i> |
| Rwanda | Andorra |
| Singapore | Argentina |
| Slovakia | Colombia |
| Viet Nam | Croatia |
| Slovenia | Dominican Republic |
| South Africa | El Salvador |
| Zimbabwe | Guatemala |
| Switzerland | Italy |
| Trinidad and Tobago | Peru |
| Turkey | Spain |
| Uganda | Venezuela |
| Tanzania | <i>The Church of Sweden</i> |
| United States | Sweden |
| Burkina Faso | |
| Uruguay | |
| Zambia | |
| Germany West | |
| Germany East | |
| Serbia | |
| Montenegro | |
| SrpSka - Serbian Republic of Bosnia | |
| Bosnia Federation | |

Notes:

1. Coding of state church status is taken from Barro and McCleary (2005), which is based on Barrett (1982) and Barrett et al. (2001).

Appendix Table XIX: U.S. Supreme Court Decisions on Church-State Separation

| | |
|----------|---|
| 1940 | Minersville School District v. Gobitis (1940) |
| none | In an 8-1 Court Decision, the Court ruled that a school district's interest in creating national unity was sufficient to allow them to require students to salute the flag. |
| 1943 | West Virginia State Board of Education v. Barnette (1943) |
| none | The Court ruled 8-1 that a school district violated the rights of students by forcing them to salute the American flag. |
| 1947 | Everson v. Board of Education (1947) |
| decrease | Supreme Court decision finding that a New Jersey law providing for reimbursement to parents of parochial school students for transportation costs on public busses is constitutional. |
| 1948 | McCollum v. Board of Education (1948) |
| increase | By a 6-1 vote the Supreme Court agreed with Mrs. McCollum, an atheist mother, and disallowed the practice of having religious education to take place in public school classrooms during the school day. |
| 1962 | Engel v. Vitale (1962) |
| increase | The Court ruled 7 to 1 that it was unconstitutional for a government agency like a school or government agents like public school employees to require students to recite prayers. |
| 1963 | Abington Township School District v. Schempp (1963) |
| increase | The Court ruled 8-1 against requiring the recitation of Bible verses and the Lord's Prayer. |
| 1968 | Board of Education v. Allen (1968) |
| decrease | Supreme Court decision finding that a New York Law requiring public school districts to purchase text books for private schools, including parochial schools, is permissible and not a violation of the Establishment Clause. |
| 1968 | Epperson v. Arkansas (1968) |
| increase | The Court found that an Arkansas law prohibiting the teaching of evolution is impermissible because it violates the Establishment Clause and prohibits the free exercise of religion. |
| 1971 | Lemon v. Kurtzman (1971) |
| increase | On June 28th, 1971, the Court unanimously (7-0) determined that the direct government assistance to religious schools was unconstitutional. |
| 1972 | Wisconsin v. Yoder (1972) |
| none | On May 15th 1972 the Court ruled 6 to 1 that the compulsory education law in Wisconsin did indeed violate the Free Exercise Clause for Amish parents. |
| 1973 | Committee for Public Education v. Nyquist (1973) |

increase The Court found all three sections of a New York law providing, among other things, tax deductions and reimbursements for children in parochial schools, unconstitutional. Each of the three parts of the law had the primary effect of furthering religion.

1975 Meek v. Pittenger (1975)

increase Supreme Court decision invalidating most of two Pennsylvania laws providing for instructional materials and equipment to religious schools because most of that aid could be easily diverted to religious purposes.

1977 Wolman v. Walter (1977)

increase The Court allowed Ohio to provide standardized tests, therapeutic and diagnostic services to non-public school children. However, the state was not permitted to offer educational materials or subsidize class field trips.

1980 Stone v. Graham (1980)

increase The Court ruled that a Kentucky law requiring the posting of the Ten Commandments in each public school classroom in the state to be unconstitutional.

1981 Segraves v. California (1981)

increase A California judge ruled that teaching evolution in public school science classes does not infringe upon the rights of any students or parents to the free exercise of their religion, even if they sincerely believe that evolution is contrary to their religious beliefs.

1981 McClean v. Arkansas (1981)

increase The Court found that Arkansas' "balanced treatment" law mandating equal treatment of creation science with evolution was unconstitutional.

1983 Mueller v. Allen (1983)

decrease The Supreme Court rules 5-4 that a Minnesota law allowing parents to make tax deductions for expenses incurred through things like textbooks and other supplies at private schools is constitutional, even though most of the benefit goes to religious and not secular schools.

1985 Aguilar v. Felton (1985)

increase In a 5-4 Court Decision in 1985, the Court overturned New York City's program of paying the salaries of public employees who provided any remedial assistance to low-income students in parochial school environments.

1985 Grand Rapids School District v. Ball (1985)

increase Grand Rapids School District offered two programs conducted in leased private school classrooms: one taught during the regular school day by public school teachers and the other taught after regular school hours by part-time teachers. Both were found unconstitutional.

1985 Wallace v. Jaffree (1985)

increase The Court found that an Alabama law requiring that each school day begin with a one minute period of "silent meditation or voluntary prayer" was unconstitutional.

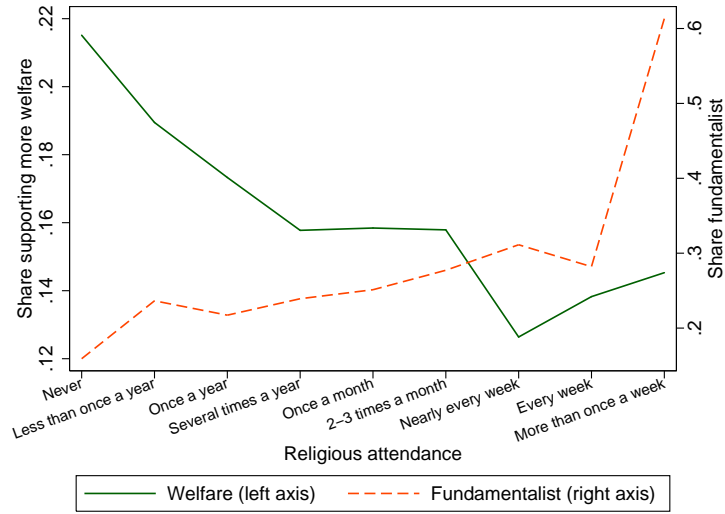
| | |
|----------|---|
| 1987 | Edwards v. Aguillard (1987) |
| increase | In a 7-2 Court Decision, the Court invalidated Louisiana's "Creationism Act" because it violated the Establishment Clause. |
| 1989 | Board of Education of Kiryas Joel Village School v. Grumet (1989) |
| increase | The Court found that a school district boundary was unconstitutionally drawn to deliberately aid a particular religious group. |
| 1990 | Webster v. New Lenox (1990) |
| increase | Seventh Circuit Court of Appeals ruled that school boards have the right to prohibit teaching creationism because such lessons would constitute religious advocacy and, hence, such restrictions do not constitute an infringement on a teacher's free speech rights. |
| 1992 | Lee v. Weisman (1992) |
| increase | On June 24th 1992, the Court ruled in a 5-4 Court Decision that the graduation prayer during school graduation violated the Establishment Clause. |
| 1992 | Jones v. Clear Creek (1992) |
| decrease | The Fifth Circuit Court ruled that it was not unconstitutional for a school to allow graduating seniors to vote on whether or not there would prayers during graduation ceremonies. |
| 1993 | Zobrest v. Catalina Foothills School District (1993) |
| decrease | In 1993, the Court decided 5-4 to require a school district to offer a student in a private religious school the sign language interpreter he needed. |
| 1994 | Peloza v. Capistrano (1994) |
| increase | Ninth Circuit Court of Appeals decision that a teacher does not have a right to teach creationism in a biology class, that "evolutionism" is not a religion or world view, and that the government can restrict the speech of employees while they are on the job. |
| 1994 | Brown v. Woodland Joint Unified School District (1994) |
| none | Ninth Circuit Court of Appeals decision holding that a school district's use of the "Impressions" teaching aid did not constitute a promotion of witchcraft and denigration of Christianity. |
| 1995 | ACLU v. Black Horse Regional Board of Ed. (1995) |
| increase | Third Circuit Court opinion that a school could not allow students to vote on whether or not they would have a student-lead prayer during graduation because the degree of state involvement in the ceremonies meant that any aspect of it was state-approved, including the prayer and prayer content. |
| 1997 | Agostini v. Felton (1997) |
| decrease | On June 23rd, 1997, in a 5-4 Court Decision, the Court allowed public school teachers to tutor private school students in their private schools, even if the schools were primarily religious in nature. |
| 1998 | Good News Club v. Milford Central School District (1998) |

| | |
|----------|--|
| increase | Second District Court decision which found that a school district in New York could prohibit a community religious group from meeting in the school building because they would use it for specifically religious purposes. |
| 1999 | DiLorenzo v. Downey USD (1999) |
| increase | The Supreme Court let stand, without comment, a 9th Circuit Court of Appeals decision that a school district was within its rights to discontinue a program of paid advertising signs on school grounds rather than accept a sign promoting the Ten Commandments. |
| 1999 | Cole v. Oroville Union High School (1999) |
| increase | Ninth Circuit Court ruling that extremely sectarian and proselytizing speeches at a graduation ceremony could be prohibited because of the reasonable impression that the religious message was supported by the school. The Supreme Court let this stand. |
| 1999 | Freiler v. Tangipahoa (1999) |
| increase | Fifth Circuit Court of Appeals found that a disclaimer to be read before teaching about evolution ultimately had the effect of furthering religious interests and was therefore unconstitutional. |
| 2000 | Santa Fe School District v. Doe (2000) |
| decrease | The Supreme Court ruled that official, student-led prayers before a school football game violated the separation of church and state. |
| 2000 | Mitchell v. Helms (2000) |
| increase | Supreme Court decision allowing for educational materials and equipment to be given to religious schools, even if such equipment could be and is diverted for religious purposes - so long as this aid is granted to any religious or private school in an even-handed manner. |
| 2001 | LeVake v. Independent School District (2001) |
| increase | A federal district court finds that a school may remove a teacher from teaching a biology class when that teacher, a creationist, cannot adequately teach evolution. |
| 2002 | FFRF v. Rhea County Board of Education (2002) |
| increase | A federal district court decides that a public school cannot have students from the local Bryan College come in to teach Bible classes. |
| 2002 | Zelman v. Simmons (2002) |
| decrease | The Supreme Court rules 5-4 that a Cleveland, Ohio, program which spends large amounts of public money on subsidizing education at religious schools is constitutional. |

Notes:

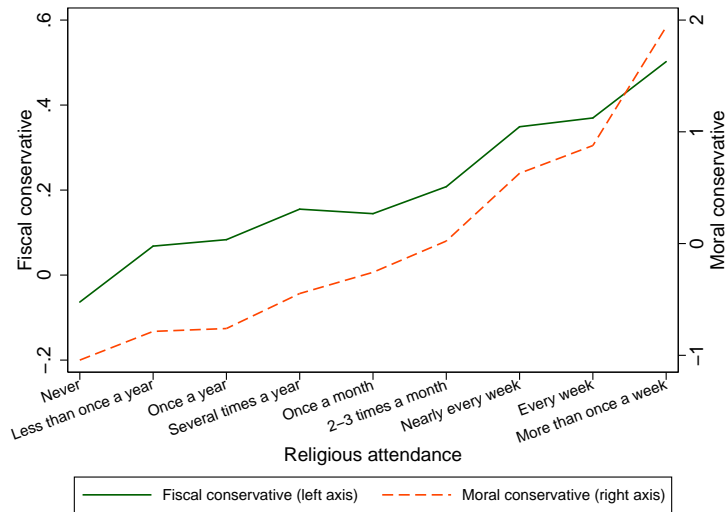
1. Data from About.com "Supreme Court Decisions-Religion in Schools", which document U.S. Supreme Court activity (where the Supreme Court either made a decision or let stand a lower court decision) and are drawn from Hall (1999) and Alley (1988; 1999).

Appendix Figure 1: Welfare Attitudes and Fundamentalism in the U.S.



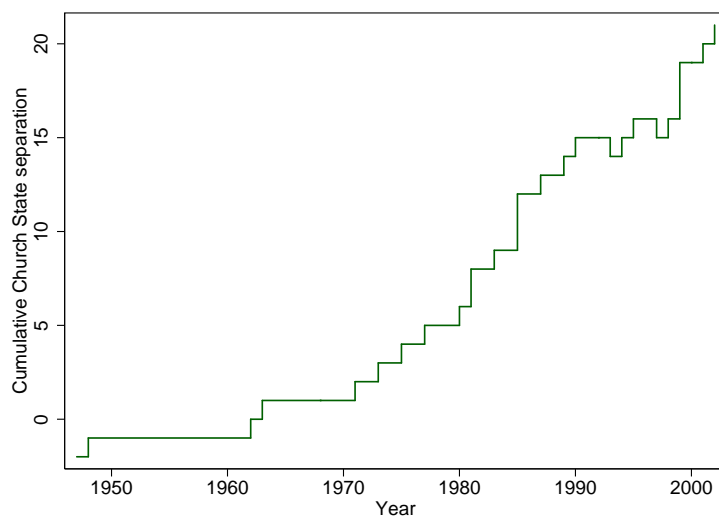
Notes: Data are from the General Social Survey cumulative file, 1972-2012. 31% of Americans are fundamentalist according to the General Social Survey. Religious attendance and fundamentalism are recorded directly in the General Social Survey. Respondents are classified as supporting welfare if they answer that we are spending too little on welfare. Sample is the white population.

Appendix Figure 2: Welfare attitudes and Fundamentalism in the U.S. - Principal components



Notes: Data are from General Social Survey cumulative file, 1972-2012. Fiscal and moral conservative are the predicted first factors from principal component analyses of the full data employed in Table I. Missing values are imputed the value 0 in the standardized variables. Sample is the white population.

Appendix Figure 3



Notes:

- 1. The graph shows the cumulative number of church state separations defined as the number of increases minus the number of decreases since 1947.*
- 2. See Appendix Table XIX for a full list of U.S. Supreme Court Decisions.*